Reckoning ruin:
International Relations theorising and the problem of Time

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Summary

This thesis concerns the relationship between IR theory and time. More specifically, I scrutinise simultaneous and seemingly contradictory visions of Western Standard time, or clock time, and the problem of Time, understood as time's natural propensity for bringing dissolution, discord, and death to human experience. I develop two primary wagers about these phenomena, and work through their implications to show how this ostensible contradiction results from tensions intrinsic to developing IR theories and recapitulates a venerable way of appraising time. The first wager is that all 'time' utterances result from symbolic representations of efforts to time various changes. In particular, a discursive emphasis on the problem of Time suggests that the timing activity being referred to is faltering or failing. The second wager is that narrative is a sort of timing activity integral to both retrospective understanding and lived experience. Narrative propounds a timing standard by which people orient themselves and act in the world, but is also itself the product of timing operations resulting in a temporal vision. After elaborating these wagers, I use them to examine the process of developing IR theories. First, I explicate IR as a narrative vocation by scrutinising disciplinary reactions to surprising change. Second, I address IR methodologies and find that various ways of reasoning use narratives to reduce time's flow. Third, I unpack the narrative and temporal aspects of a variety of IR explanatory forms and show how each reconfigures the pitiable effects of time. Finally, I discuss how quantitative IR relies on narrative timing techniques to preserve symbolic connections to eternity in the face of temporal phenomena. These moves contextualise IR as a thoroughly narrative timing project whose viability hinges on its ability to placate, manage, or tame the problem of Time, which holds striking implications for IR as a social science.

For Halle, for any ‘time’, for all Time

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How heavily old Father Time hath laid
His touch upon the living and the dead!
O, who can count what changes he hath wrought,
In the short space so quickly grasp'd by thought!
We see the mighty ravages of Time.
No! by the thronging annals of the year,
We know the haughty conq'ror hath been here;
But is it ever thus with rapid Time!
Doth naught but ravage mark his step sublime?
– 'The Valedictory', in *The Ladies' Repository, and Gatherings of the West*

But all the clocks in the city
Began to whirr and chime
O let not Time deceive you,
You cannot conquer Time.
In the burrows of the Nightmare
Where Justice naked is,
Time watches from the shadow
And coughs when you would kiss.
In headaches and in worry
Vaguely life leaks away,
And Time will have his fancy
To-morrow or to-day.
– 'As I walked out one evening', W.H. Auden

Introduction

No sooner has one's mind become adjusted to some understanding of the currently new than the rapid developments of our time already presage its obsolescence.
–John Herz[1]

By Time are houses overturned—doom is through Time—and things graven shattered. From it no single mortal man escapes.
– Zurvān, the Persian God of Time[2]

Ruination days[3]

It is five minutes to midnight. Everywhere in the world, in all time zones, no matter what wristwatches, wall clocks, and digital displays show, it is five minutes to midnight. In the next year, a minute or two may pass or return, making it four to six minutes to midnight—figurative midnight, that is, the moment of humanity's annihilation. So the Doomsday Clock, maintained by the Bulletin of Atomic Scientists, proclaims. The Bulletin has used the Doomsday Clock to symbolise global threats for sixty-five years, since editors placed it on the cover of their first magazine to announce 'the urgency of the nuclear dangers' to world publics and political leaders.[4] Typically displaying only the last quarter of the hour, every cover of every issue of the Bulletin since has employed this image to identify time's passage with the world's descent into wreck and ruin. Far from merely 'telling' abstract time, the Doomsday Clock reckons global ruin.[5]

So too does International Relations (IR),[6] which analyses a realm where change and danger seem ubiquitous and inseparable while stability and progress remain as elusive as they are desirable. It often appears as if each new moment or tick of the clock poses the possibility

[1] (Herz 1959:33–34).
[2] (Quoted in Brandon 1965:40).
[3] The phrase is from (Welch 2001b).
[4] (See Timeline n.d.)
[5] Elsewhere, the CIA's Counterterrorism Centre has a permanent plate posted over its entrance reading, 'TODAY IS SEPTEMBER 12, 2001' (Mazzetti 2013:EPUB loc. 246).
[6] Following the disciplinary norm, I capitalise references to the academic field.

that political units will break up, diplomacy will break down, or large-scale violence will break out, just to name a few. In light of such vicissitudes it is tempting to treat time as a *force* whose passage, '*in and of itself*, … shapes events' (Gaddis 1992:39 emphasis added), and rarely for the better. This recapitulates a longstanding relationship between human existence and time that I refer to as *the problem of Time*. Although I will soon provide an extended summary, the basic idea is that the passage or flow of time *brings dissolution, discord, death, and other disturbing experiences* to human existence.

However, the problem of Time runs alongside a very different, more recent, and common vision of time as an abstract, unified, and unthreatening feature of existence. On this view time is simply what the mechanical clock and Gregorian calendar display, a neutral and enumerated dimension in which life unfolds. Due to its geopolitical origins, I call this *Western Standard 'time'* (Hom 2010). How can this be? How can such dissimilar and indeed diametric qualities be gathered under the same word, 'time'? How can time be a malevolent force and a neutral dimension all at once? In particular, how can IR speak of 'time' as an unproblematic abstraction *and* confront it as the symbol of wreck and ruin? The motive force behind this project is to sort out this apparent contradiction in IR's relation to time.

In doing so, we will see that its simultaneous tendencies to embrace and confront time inflect IR toward the view that *intellectual viability* depends on our ability to *placate, manage, or tame* time's flow. IR theories are developed through scholars' substantial efforts to replace the discordant features associated with the problem of Time with stable, intelligible, and meaningful order. In particular, we will see that from the birth of the field to the present day, from the idiographic to the nomothetic, from the self-consciously scientific to the happily hermeneutic, and even from the literary to the quantitative, *IR theory is constituted by various responses to the problem of Time*.

Problems with 'time'

This may seem a roundabout way to analyse the relationship between IR and time. Why not simply examine what scholars have to say about 'time', analyse, and draw conclusions? However, the very puzzle that animates this project—the multivalence of 'time'—prevents a straightforward engagement. Furthermore, 'time' is ubiquitous in IR as well as in ordinary language—we easily use and understand 'at the same time', 'at no time', 'in no time', 'wartime' and 'peacetime', 'a time for' this or that, and that 'time passes', 'flies', or moves in

some other way.[7] Finally, as I discuss below, even in the rare instances when IR theorists analyse 'time', the results are mostly unsatisfactory. They either deploy 'time' with quotidian ease or analyse it in an overly quiescent fashion that tolerates incoherence and inconsistency. Either approach recommends scepticism, for since time is everywhere but hard to locate in IR, pursuing it without reflection promises to lead one anywhere but toward greater understanding.

In order to grapple with linguistic profusion and scholarly confusion, I henceforth place scare quotes around *'time'* when summarising others' usages or in reference to *temporality*, a particular, intelligible representation of 'time' resulting from human interpretation. I capitalise *Time* to indicate the idea of Time *as such* or to the *totality of temporalities* (more on this later, see pp. 61-62), and use 'the problem of Time' to refer to the problematic relationship introduced earlier.[8] Finally, any unadorned usage reflects idiomatic constraints that are unavoidable *from time to time*. This is admittedly contrived and somewhat complicated, but it is necessary in order to explicate Time and its relationship to IR as clearly as possible. I do not intend it to impose any theoretical stance but rather simply to clear the cluttered ground of our discussion of 'time'. The murky ubiquity of 'time'-related utterances also necessitates that I employ several additional terms of art in what follows. I provide definitions whenever they first appear, and a glossary for further reference (see Appendix, pp. 239-41).

In order to gain better traction on the relationship between IR and Time, the thesis unfolds in two parts. In Part I, I develop two primary wagers about how better to analyse Time. First, I turn to the social theory of Norbert Elias to develop and defend the position that all

[7] 'Time' is the most popular noun in English (The Popularity of "Time" Unveiled 2006). A keyword search for 'time' in IR publications returns more citations than such signal concepts as 'power', 'sovereignty', 'strategy', 'war', 'security', and the like. This does not change if we combine 'time' with field-indicative terms:

	"international affairs"	"international relations"	"international politics"	"world politics"	Total
time AND	520	921	262	392	2,095
power AND	492	690	280	394	1,806
war AND	450	740	238	272	1,700
security AND	394	637	183	213	1,427
cooperation AND	217	458	129	169	973
conflict AND	187	509	122	112	930
strategy AND	171	314	113	121	719
space AND	20	182	98	118	517
sovereignty AND	70	133	56	60	319

Figure 1: Thousands of Google Scholar keyword hits (as of 10 November 2012)

[8] This distinction is informed by but non-identical with Hoy (2009:xiii), who distinguishes between 'time', which is 'universal time, clock time, or objective time', and 'temporality', which is 'the time of our lives' or time 'as it manifests itself in human existence'.

'time' utterances result from our symbolic representations of efforts *to time* various changes—that is, to relate and coordinate those changes for some purpose. Second, in order to render that wager more commensurate with IR theory, I argue that narrative—the intelligible and meaningful configuration of events—is a sort of timing activity.

In Part II, I work through the implications of these wagers in IR to make the case that its seemingly contradictory relationship to Time, in which it treats Time as *both* a malevolent force *and* a neutral dimension, results from the dynamics and tensions involved in theorising international politics and recapitulates a venerable tradition of speaking about 'time'. This involves cutting into the process of explaining and understanding international politics at key moments in order to elaborate a basic structure of theorising-in-action. I focus on *theorising* instead of theories for two reasons. First, two compelling critiques of the 'times' of IR theories already exist (Walker 1993; Hutchings 2008). These provided much inspiration for this project and I can do little to improve on them. Instead, I have chosen to offer what I think of as a complementary story examining different aspects of IR theory. Second, since IR theorists are social beings that exist 'in time', we can treat IR theories not just as static objects but also as processual outputs and we can scrutinise the putting out processes. My hope is that doing so will help explain the many disparate references to 'time' in IR and uncover the theoretical dynamics behind them.

Before either of these major steps, two preliminaries are required. We need a clearer picture of the problem of Time and of the extant literature. Elaborating the problem of Time is required because it features throughout the thesis, because it is the silent partner to our common invocations of Western Standard 'time' and to more explicit theories about Time, and because it is a most venerable way of thinking about human existence. After doing this, I review the extant literature on time and show why it does not provide an adequate basis for moving forward.

The problem of Time

Every project must begin somewhere. A tempting and typical start point might be classical Greece (e.g. Gilpin 1986; Lebow 2003; Hutchings 2008), but the problem with this historical period is that it does not reach back far enough in the long life of 'time'. Long before philosophy or political theory emerged in Greece the ancient world grappled with time as a *figure of discord*, an agent or force responsible for the most challenging and pitiable moments in life.

Ideas about the universe, human existence and Time that eventually informed the classical epoch were part of an earlier Near Eastern understanding of the world as made by an infinite Time deity—also known as the god of eternity—who was *at once* creator, bringer of change, the guarantor of both finitude and infinitude. Such Time deities were temporal *and* Timeless because they housed the flow of Time within eternity, which encompassed the totality of existence and was thus 'full' of Time yet also 'beyond' it. Because it encompassed every thing and all moments, eternity was an infinitely large yet punctual (point-like) moment comprising the best and the worst eventualities and everything in between.

However, prior to travelling westward, Time underwent an estrangement. Original time gods, like the Persian Zurvān or the Zoroastrian Ahura Mazdāh, split in two and their infinite, benevolent halves withdrew to the heavens while their malevolent halves gained dominion over the human or 'sublunar' realm (Boyce 1957:313; Brandon 1965:39–41; Whitrow 1988:33).[9] Time's beneficial attributes such as creation, birth, positive change, and infinity decamped to the heavens, leaving humans a realm beset by death, decay, and destabilising change.

This way of thinking about Time diffused into the classical world via Mithraism, Mesopotamian astralism, and the Mycenaean and Ionian migrations and inflected the great systems of thought emerging on the eastern edge of the Mediterranean, Greek philosophy and Judeo-Christian monotheism. Herodotus and Plutarch were both aware of the problem of Time (Brandon 1965:45–46), and Plato's (2010:440c–d) philosophical and political thought resounded with issues entailed by the malevolent impact of Time on earthly affairs (Gunnell 1987). In Judaism and later Christianity, humanity is thrown into a 'temporal' existence of sin, imperfection, and death in the story of the creation and fall (see Pagels 1988), which establishes a genetic alienation between humans and YHWH analagous to those between the ancient time deities. It is indicative that by the fifth century CE, Augustine's seminal political, philosophical, and theological work laboured under the burden of an inextricably temporal existence (Markus 1970; Ricoeur 1984:28).

In addition to pre-figuring human experience, the way in which the problem of Time emerged from a cosmological split left an enduring and pointed reminder of its superior remainder, eternity (or infinite Time),[10] but little hope of any reconnection in a cosmic unity. Occurring during the second millennium BCE, this *ancient estrangement* of Time marked an

[9] 'Sublunar' conventionally indicates the earthly realm of finitude, Time, and humanity while 'superlunar' indicates the heavenly domain of stable cycles and eternal gods.

[10] Although often treated as synonymous, the two are not, see (Sorabji 2006).

early and important fork in the road for Western thought. Afterward, the only option for humanity was passing efforts to symbolically transcend or 'surpass' the troubling experience of Time 'by moving in the direction of eternity' (Ricoeur 1984:22). For temporal beings, eternity is available only as a metaphor, symbol, or virtual representation, as in attributions of endurance, stability, structure, and order. Humans can *evoke* eternity but never *reunite* with it. Since these evocations are symbolic I henceforth characterise them as 'quasi-eternal'.

Greek philosophy and Judeo-Christian theology effectively embedded the problem of Time in Western thought. Since the classical period, philosophy mostly opposes qualities of flowing and changeable in favour of stasis, stability, and objectivity (Gunnell 1987). As a category of inquiry, '[o]nce all attention was focused on the eternal, the temporal was so lowered in status that it could no longer be taken seriously; it was not the venue of Being or Truth' (Smith 2008:53). And from at least Augustine on, the eternal could only be experienced fleetingly through constant religious devotion and observance (Jordan 1972:271). Any more durable reconnection awaited God's reintegration of heaven and earth, which would only occur at the moment of his choosing—suggestively known as 'the fullness of time' (Gal. 4:4) and the point past which 'no more time should *intervene*' (Rev. 10:6). The Dominican philosopher Meister Eckhart (1992:237) characterised the estrangement most strikingly: 'Time is what keeps the light from reaching us. There is no greater obstacle to God than time. … not time alone but temporalities; not only temporal things but temporal affections; not only temporal affections but the very taint and aroma of time.'[11]

It should be little surprise, then, that in spite of comparatively recent constructions of time as a homogeneous and absolute dimension reckoned by clock and calendar (see Zerubavel 1985; Landes 2000), we can still relate to time as a force *confronting* human existence. The English poet Edmund Spenser (1591) referred to the 'Spoil of time' which 'devours' everything on earth, while Lord Byron (2005:st. 34, 2008:CXXX ln. 1162–63) exclaimed, '[o]h Time! The beautifier of the dead, adorer of the ruin', and observed that 'Time steals along, and Death uprears his dart'. Elsewhere time is a 'devouring hand' (in Dobson 2007:13), 'the fire in which we burn' (Schwartz 1967), or a 'thief you cannot banish' who 'rob[s] us of our former selves' (McGinley 1953; Hailey 1998:89).[12]

[11] Elsewhere, '[h]eaven is clear and unsullied in its brightness, free from any taint of time and place'; and God's essence 'consists of His immovable sanctity' (Eckhart 1992:172, 1909:45).

[12] Time is similarly problematic in Western art, where famous works depict the time god Saturn, who gained power by castrating his father and maintained it by devouring his own children (Rubens 1636; Goya 1820). Elsewhere, the figure of Father Time comingles with the Grim Reaper (Unknown 1620; Flanagan 1896).

So it goes in politics and IR. In much legal and political thought, 'time' functions 'as an abstract historical actor' or a 'natural phenomenon with an essential nature' that moves and changes society, human action, and thought (Dudziak 2012:3–4). Similarly, the natural 'passing of time' is a force that erases experience, memory, and the possibility of justice (Booth 2011:750), constrains democratic processes (Linz 1998), and complicates the relationship between domestic, regional, and international politics (Woodward 1996:2). Most strikingly, it eviscerates the possibilities of human existence: 'man is nothing: he is at most time's carcase' (Marx 1963:54).[13] Even when conceptualised less normatively, 'time' remains a stand-alone entity that 'operates in the background to affect several explanatory factors in a variety of ways' and makes it, '*ceteris paribus*, more likely that institutions, actors themselves, and their preferences may change' (Büthe 2002:486, 484 emphasis added). So when John Lewis Gaddis (1992:39) advised IR scholars to think more about 'time' as something that 'in and of itself' shaped events and experiences, he was advocating a return to a particular, longstanding, and largely angst-ridden way of relating to Time.

The flood of Time

One way that the problem of Time is called forth deserves extended attention. This is the use of fluvial metaphors to describe temporal qualities. The most common attribution comes from Heraclitus, who asserted variously that 'everything flows',[14] that the universe is like a river, and that 'you cannot step twice into the same stream' (in Plato 2010:402a). Such descriptors comported broadly with classical Greek thought, in which 'Cronus' was both a variant of the Greek word for time and the name of an ancient stream (Plato 2010:402b). Heraclitus' aphorisms were combined by Marcus Aurelius (2006:4:43): 'Time is a sort of river of passing events'. Since then, fluvial metaphors have offered unsurpassable symbolic resources for understanding Time by virtue of their vivid evocation of the 'transit of events through the present' (Ricoeur 1984:21; Newton-Smith 1980:4–5; Pattison 1907:238).[15]

Yet although flow, flux, and other fluvial descriptors are not as obviously troubling as malevolent gods or ungodly defects, neither were they intended as agnostic abstractions. Ra-

[13] In more abstract discussions 'time' still works to dissolve rather than resolve, for example by rendering the formal distinctions of thought more 'porous' (Harvey 2000:542).

[14] Attributed by Simplicius, see (Barnes 1982:65).

[15] For Ricoeur, the unsurpassable metaphor is that of basic 'transit through' rather than any specifically fluvial quality. However, in the problem of Time, passing becomes more threatening its association with unruly waters. This combines not only Ricoeur's (1984:21) ideas of '"passing away," in the sense of ceasing, and that of "passing through," in the sense of relegating', but also the ideas of "passing under" or "over", in the senses of enigmatic and overwhelming.

ther, they qualified human existence in vivid, helpless terms.[16] Most Near Eastern cosmologies and monotheistic religions include a flood myth in which a deluge threatens to destroy humanity.[17] A child of Cronus, the Greek sea god Poseidon's name recalled how 'the power of the sea restrained [man] … and hindered his advance' (Plato 2010:402e).[18] Classical Greece was gripped chronically by a destabilising sense of 'flux' (Gunnell 1987:23), while in Augustine the 'brackishness of the sea' symbolised humans as 'so tempestuously arrogant and so changeably lax' (Augustine 2011:book 13; see Cranz 1972:365). Those devout enough to reform their ways comprised an 'island of purity in an ocean of corruption' (Pagels 1988:104). Likewise, we still commonly refer to a 'sea of troubles' on which human endeavours might be '[s]wept into wrecks anon by Time's ungentle tide!' (Byron 1899) and reinforce the fluvial association when we acknowledge with Chaucer that 'Time and tide wait for no man' (Byman and Pollack 2007).[19] So it is with rivers, which signify unforeseeable and unavoidable discordance.[20] Machiavelli (1988:85) described Fortune as 'one of those dangerous rivers that, when they become enraged, flood the plains, trees and buildings, move earth from one place and deposit it in another. Everyone flees before it, everyone gives way to its thrust, without being able to halt it in any way.'

The flummoxed cant of fluvial rhetoric connects Renaissance humanism with Enlightenment science just as it does classical with modern thought. Reflecting on his quest for absolute certainty, René Descartes (2008:17) reeled: 'It is as if I had suddenly fallen into a deep whirlpool; I am so tossed about that I can neither touch bottom with my foot, nor swim up to the top.' In response, he sought one 'immovable point' from which to anchor his philosophical reconstructions if he hoped to 'establish anything firm and *lasting* in the sciences' (Descartes 2008:13 emphasis added). Isaac Newton relatedly viewed truth as a 'great ocean'

[16] This generally negative inclination is evident in Aurelius' (2006:4.43) description of the 'river of time': 'strong is its current; no sooner is a thing brought to sight than it is swept by and another takes its place, and this too will be swept away.' Elsewhere: 'Existence is like a river in ceaseless flow, its actions a constant succession of change, its causes innumerable in their variety: scarcely anything stands still' (Aurelius 2006:5.23, see also 2.17).

[17] E.g., Judeo-Christian: 'And, behold, I, even I, do bring a flood of waters upon the earth, to destroy all flesh, wherein is the breath of life, from under heaven; and every thing that is in the earth shall die.' (Gen. 6:17); Babylonian: 'By our hand a Deluge ... will be sent; to destroy the seed of mankind' (Anonymous 2003:13.105–06, 13.113), and '[t]he raging of Adad (storm god) reached unto heaven // (And) turned into darkness all that was light. ... (Even) the gods were terror-stricken at the deluge' (see Barton 1937:327–31; Hämmerly-Dupuy 1968; Dundes 1988).

[18] 'Poseidon' stems from *ποδον* ('foot') and *δεσμος* ('bond'), see (Plato 2010:402e).

[19] In the case of Chaucer's well-known remark, this is more than an assocation. In Old and Middle English, 'tide' means 'time' (Tide, N. 2013).

[20] Even when Time does not associate directly with the ocean or the tide, the fluvial metaphor still lends a heightened air of peril: 'Time is the reef upon which all our frail mystic ships are wrecked' (Coward 1999); or, as in the Breton Fisherman's traditional prayer, 'O God, thy sea is so great and my boat is so small.'

in which he had never swam (related in Brewster 1855:407). And compared with effluvia, philosophising should be concerned only with 'the eternal, immutable Ideas' (Dillon 1977:92). The problem is that 'pure flux' indicates transit 'from nothing to nothing' (Collingwood 1925:148), and must necessarily be 'made comprehensible' (Mink 1978:185) if we are to avoid the difficulties intrinsic to 'deep waters' (Hacking 1990:7).

In political practice and commentary, fluvial metaphors connote tangible anxiety. As Israel and Hamas resumed violent exchanges in the fall of 2012, the US National Security Advisor, Tom Donilon (2012 emphasis added), remarked that foreign policy planning was opposed by 'daily challenges and *cascading* crises'. Nearby, the 'Arab Spring' left the '[r]ules of the game … in flux, with the constitution still unwritten, parliament dissolved', and the region in peril (Lynch 2012).[21] Further afield, US Presidential nominee Mitt Romney (2012 emphasis added) criticised the incumbent, Barack Obama as follows: 'U.S. embassies throughout the region have been *stormed* in violent protests. … Yet amid this upheaval, our country seems to be at the mercy of events rather than shaping them. … if Iran moves toward nuclear *breakout*, or if Israel's security is compromised, America could be pulled into the *maelstrom*.' And a journalist recently noted that the Syrian civil war involved 'pressures that have been in play for decades, … And you can feel the dam kind of cracking. *What's behind the dam is not water but history*' (see McKnight 2012 emphasis added).

So it goes in IR, where World War One marked 'a break-through, in the grand style, of the forces of disruption, carrying away in their path barriers that had held for a hundred years' and introducing 'flux' where previously 'all seemed stable and known' (Zimmern 1936:92–93; Merriam 1922:317). Alternatively, it was another example of humanity 'stranded for a time on this floating globe' and desperately in need of knowledge of the 'deeper process of time' that carries the world along so as to avoid 'a deadly literal-mindedness and an inability to keep pace with the fluidity of events' (Butterfield 1960:15, 13; see also Merriam 1922:318). More recently it is data rather than (or in addition to) events that presents scholars with a 'deluge of information pouring over the internet' and requires careful theorising and testing for anyone intent on 'diving into prognostication' (Ulfelder 2012b).

It is no coincidence that scholars attach fluvial metaphors to problematic phenomena. Internal conflict and 'waves' of nationalism threaten to 'sweep' or 'spill' over state borders (Banks 1969:355; van Evera 1990:23; Hurrell 1995:348; Byman and Pollack 2007; Atzili 2012:2, 205, 208, 212); terrorism is 'most fluid and dynamic' and therefore difficult to under-

[21] Elsewhere, Azerbaijan was lauded as 'an island of stability in a sea of chaos' (Director 2012).

stand (Coaffee 2012:80). Such qualities defy explanation, so scholars must 'tease coherent meaning out of the chaos and turbulence that underlie the current course of events' (Rosenau 1990:xiii). And compared with physicists who can 'employ mathematical formulas to investigate the dynamics of turbulent winds and rivers, those of us concerned with global politics have yet to devise a set of elegant propositions on which to base the analysis' (Rosenau 1990:xiv; cf. Tilly 1995:1601–02).

Scholars also fling fluvial epithets at each other, as when Michael Banks (1984:13) refers to realists drowning in an 'ocean of ignorance' or David Welch (2010:452) critiques Ned Lebow's (2008) theorisation of change as requiring 'delicate seamanship' due to the 'danger of attempting to explain something fluid in terms of something else fluid'. Alternatively, critical scholars invoke fluvial metaphors precisely for their naturalised association with destabilisation. Martti Koskenniemi (2004:2; also McSweeney 1999:72) focuses on 'sensibilities', whose 'greater fluidity' makes them well-suited for his critique of international law. And for Robert Cox (1981:130), 'the events of the 1970s generated a sense of greater fluidity in power relationships, of a many-faceted crisis, crossing the threshold of uncertainty and opening the opportunity for a new development of critical theory directed to the problems of world order.' Fluvial metaphors have not lost any of their classic connotations; just the opposite, it is precisely because they imply disorder and destabilising change that such invocations endure in disciplinary discourse.

Given how often fluvial metaphors are used to decry situations of surprising, bewildering, or otherwise discordant change—all qualities traditionally associated with Time's flow—in this project I treat them as a *proxy* for the problem of Time. As already mentioned, I deputise in the opposite direction as well, treating concepts related to stability and order as metaphors for eternity. International political practitioners and theorists recapitulate a longstanding confrontation with Time when they pine for symbols of its preferred remainder, eternity. This is evident in the clichés of international political practice and thought: 'progress' requires stability; change associates closely with 'chaos'; borders, identities, and concepts must be 'fixed'; solutions are proposed for a 'lasting' or 'perpetual' peace; and surprises are unwelcome even if inevitable and sometimes positive. The problem of Time has long engendered a strong desire for the eternal and, as we shall see, IR theory is no exception.

Times in the literature

Having introduced the problem of Time in some detail, it remains to show why I do not rely more on extant literature to develop my thesis. A brief review demonstrates that neither phys-

ical notions of time, nor philosophical efforts, nor emerging work within IR provide advantageous points from which to proceed. Albeit predominant, physical notions are quite recent and historically contingent. Philosophical efforts confront what Paul Ricoeur (1988:193, 1984) calls an 'aporia' at the heart of Time, an unbridgeable gap between subjective-phenomenological and objective-celestial 'times' that bedevils efforts to elucidate the 'oneness' of Time in a unified intellectual system. And in IR it is too often unclear what 'time' actually means in a given discourse. Furthermore, all three literatures neglect the problem of Time.

The physical sciences have come to understand 'time' in the neutral, abstract sense of an objective and homogeneous dimension of existence (e.g. Newton 1685, 1760; see Ricoeur 1988:278n18, n20). Most in IR assume that 'time' references indicate just this understanding, but physical 'time' as we know it only emerged with the rise of the territorial state (Hom 2010). It is a relatively new technical and political accomplishment meant to render social interactions more intelligible, consistent, and manageable (Zerubavel 1976)—that is, it is a solution to the problem of Time. 'Scientific' analyses in IR that glibly rely on Western Standard constructions of physical 'time' ignore the crucial impulse behind it and risk tautology by treating a product of recent international history as a neutral, transhistorical foundation for reckoning international politics.

Philosophical treatments of Time fall into two related categories. The specialised philosophy of time literature uses philosophy of language to speculate about Time's reality by analysing the truth conditionals of tensed or tenseless statements (e.g. McTaggart 1908, 1968:89; Mellor 1985, 1998; Smith 2002; Le Poidevin 2009).[22] Although quite robust, this literature is preoccupied with logical consistency and the conditions of Time's ontological status. For Time to function as a legitimate concept, it must become less like its fluid, unstable, and disorderly manifestation in experience and more like its traditional remainder, eternity (see Jokic and Smith 2003). This suggests that efforts to develop a philosophy of Time are actually motivated by the problem of Time.

This same 'traditional value scale' (Elias 1989c:353; Ricoeur 1984:22) informs more general philosophical treatments that try to establish Time's ontological credentials against standards of universal consistency, absolute coherence, or qualitative permanence (Aristotle 1984; Augustine 2011; Newton 1760). But philosophers have encountered unre-

[22] Tensed statements refer to 'past', 'present', and 'future' as actual temporal locations of events (see Smith 2002), while tenseless statements use only the relational terms 'before', 'after', and 'simultaneous with' to relate occurrences (see McTaggart 1908); for overviews, (Oaklander 1996; Craig 2000).

solvable aporias in their attempts to square subjective, idiosyncratic, and fleeting human 'time' with the more objective, regular, and unified 'time' of the physical cosmos (Ricoeur 1984).[23] Due to its metaphysical commitments, philosophy privileges objective 'time'as a reliable theoretical concept but mistrusts subjective variants because of their association with human frailty (Ricoeur 1988:11–96).

Even when theorists begin from subjective 'time' it is within this same metaphysical hierarchy, which demands that the problem of Time be purged. For example, phenomenologists theorise Time from the basic data of human experience, emphasise the nebulous and 'distended' quality of the 'present' due to memory and anticipation, and thereby accommodate significant diversity (e.g. Husserl 1964; Heidegger 1996; Merleau-Ponty 2002; for a proto-example, Augustine 2011).[24] Yet phenomenologists remain at pains to show how subjective 'time' provides an *ontological foundation* of objective 'time', for planetary motion only seems more inexplicably consistent and thus philosophically elevated when compared with the variability of human experience.[25]

Ricoeur's aporia haunts both of these efforts to bring subjective and objective 'times' together in a unified system. While metaphysics subordinates subjective 'time' as less than real, phenomenology only elevates it past the traditional ontological threshold by adding 'layer upon layer' of concepts meant to conjure absolute consistency and abstract elegance out of messy experience (Ricoeur 1988:261; see Muldoon 2006:50; White 2009). In either case, philosophical approaches have yet to meet their own internal standards of validity, so their warrant for providing an exogenous foundation for IR's investigation of Time remains unsigned.

Times in IR

Unfortunately, IR offers little better in the way of an approach to the question of Time. In addition to intermingling the two parallel and seemingly contradictory traditions of Western

[23] This includes Kant, whose thesis of the 'invisibility of time' would seem to be at once subjective (it has to do with intuition and experience) and objective (it is presuppositional and formal). However, Ricoeur (1988:23) interprets this as privileging physical and objective 'time' because it is 'implied in the determination of objects' of experience. This returns Kant to the aporia of the 'oneness of time' in that he 'is unable to construct the presuppositions concerning a Time which itself never appears as such, without borrowing from an implicit phenomenology of time, which is never expressed as such because it is hidden by his transcendental mode of reflection' (Ricoeur 1988:44). For further discussion of Kant see pp. 41-46.

[24] Phenomenology of time consciousness should not be confused with mental Time, since the latter can be a product of some transcendental intellect or *nous* that obviates human consciousness altogether (e.g. Kant 2008; see Mooij 2005).

[25] As Ricoeur (1988:6–7 see also 23-59) summarises, '[e]very phenomenology admits, along with Kant, that time is a collective singular'. This singularity or oneness provides the 'axiom' by which philosophical efforts proceed, even if they cannot ultimately satisfy its demands.

Standard 'time' and the problem of Time, IR scholars tend to be insufficiently attentive to Time as an analytical concept and display a propensity for loose language. This makes it difficult to ascertain what they actually mean when they speak of 'time'.

Sometimes IR scholars conflate historical interpretation with Time itself. This owes much to Enlightenment philosophies of history that posited generalised and inevitable trends toward social betterment. Progress was facilitated variously by reason and/or providence (e.g. Kant 1991; Herder 2004) or a revolution of consciousness (Engels 1893). Some early-twentieth century political scientists and practitioners placed similar faith in the rule of law (Bryan 1915; Zimmern 1936), popular self-determination (Wilson 1918), and/or science and technology (see Deutsch 1959) to lead humanity into a new, more enlightened era. Recent IR works feature the spirit of freedom (Fukuyama 2006), democratic deliberation (Benhabib 2002; Habermas 2006), or evolutionary learning (Modelski 1990, 1996) as the directors of progress. Although such arguments may seem to posit a straightforward and optimistic vision of Time itself, they actually build on a pre-existing timeline along which events play out. Progress is a qualitative valuation of connected events, a *temporal* vision perhaps but hard to understand as an argument about Time itself. Furthermore, in these accounts it is not Time that ensures progress but rather some interventionary factor that overcomes the problem of Time. Political life is tempestuous and uncertain (i.e. Time-bound) until democracy, the age of reason, or some other force arrives to break decisively with the past and ensure better futures (see Walker 1993:44).[26] In speculative philosophies of history and their iterations in IR, Time is a force that, if left unchecked, poses destruction and despair; it is up to the historical interpreter to demonstrate how another force can overcome the 'natural' propensities of Time and thereby produce progress (see Hutchings 2008:28–53).

Critics such as David Blaney and Naeem Inayatullah (2006, 2010; see also Inayatullah and Blaney 2004; Hindess 2007) challenge these interpretations by unpacking their assumptions, context, and internal logic. For example, universal histories relied on tropes like 'adult' versus 'child-like' or 'forward' versus 'backward' that accomplished a sort of 'temporal Othering' (Hom 2012),[27] which supported industrial modernisation and justified colonial expansion by treating non-European peoples as analogous with Europe's ancestors and thereby assigning them to 'a *different* Time' altogether (Inayatullah and Blaney 2004:58,

[26] For example, Lord Macaulay (quoted in Dickson 1919:17; see also Beard 1927) understood democracy as a method for solving 'the issues raised in the flow of time' so that 'at length, a system of justice and order is educed out of chaos.'

[27] The term appears first in (Prozorov 2011), who proceeds by way of a derivative Hegelian yet utterly ahistorical argument that ignores the scholars treated here as well as the intellectual-historical and empirical records.

50).[28] Although Blaney and Inayatullah mount a devastating critique of progressivist histories, they are most interested in difference and inequality rather than Time itself.

Other IR theorists oppose progressive history by arguing that alienation deepens as social exchanges 'speed up' in everyday interactions (Rosa 2010), liberal democracy (Scheuerman 2004), and war (der Derian 1990, 2001). This leads to deleterious effects such as estranged human connections, the impossibility of political deliberation, or an increasingly blurred distinction between the reality and simulation of violence (der Derian 2001:11). Such 'accelerationist' arguments conflate Time itself with a temporal ratio, as in references to quickening exchanges as 'the social acceleration of time' (Scheuerman 2004).[29] Yet the idea of acceleration is hard to understand without a pre-existing understanding of Time that provides the denominator against which changes in pace are appraised. Absent an articulation of how Time itself 'speeds up',[30] this muddies rather than clarifies our understanding of Time in politics.[31] Additionally, accelerationism mostly just reverses the normative arrow of Enlightenment historicism. Instead of universal progress accomplished by the children of the Reason, accelerationists find fragmentary regress heaped on postmodern orphans by the singular effects of technological change (der Derian 2001:xv; Scheuerman 2004:18; Talisse 2005). This does not challenge the historicist conflation of temporal interpretation with Time as such.[32]

A larger literature within critical IR conducts a haphazard assault on the hastily painted targets of national-state 'time', 'linear time', and 'timelessness'. Too often, this allows critiques full of potential to punch below their weight. In an otherwise impressive discourse analysis, Lee Jarvis (2009) finds that the George W. Bush administration legitimated the war on terror using three 'temporal shapes': 'linear time', 'timelessness', and 'radical discontinuity' or 'rupture'. He derives 'linear time' from interpretations of 9/11 as 'one moment of progression within a broad, identifiable and cumulative politico-historical trajectory', post-9/11 responses as 'a series of modified transformations' designed to preserve the continuity of U.S. national identity, and claims about the certainty of outcomes (Jarvis 2009:38–39). He

[28] 'Different Time' here seems to refer to a qualitative trajectory of events.

[29] I am similarly guilty of referring too easily to 'accelerating temporalities' (Hom 2010:1166).

[30] As I will discuss in chapter one, it may be possible to show how quickening rates and paces of interaction effectively accelerate Time; however, this argument has not been explicated by accelerationists themselves.

[31] For instance, it facilitates the claim that the 'acceleration of time' is alienating humans from Time itself (Rosa 2010), which requires that we juggle at least three understandings of 'time' in the same analysis: that against which acceleration is measured, 'time' *as* acceleration, and some positive notion of 'time' from which 'accelerating time' divorces us.

[32] For alternative readings of technological change, see (Connolly 2002:149–53; Glezos 2013).

characterises as 'timeless' remarks that the war was 'the most recent moment in a continuous historical battle between good and evil' or part of a recurrent struggle 'between freedom and fear' (Jarvis 2009:40). Finally, 'radical discontinuity' or 'ruptured time' describes the administration's contrast between a previous history of stability and coherence, the novelty of 9/11, and the promised 'period of new stability' that would be 'qualitatively and entirely distinct from the original situation' (Jarvis 2009:36). These three tropes are internally incoherent and inconsistent with each other.[33] Rather than indicating some basic serial order, 'linear time' reproduces the historicist's normative assessment of some particular array of events as cumulatively progressive (see Jarvis 2009:37). 'Timelessness' indicates a recurrent pattern of events or continuous process rather than the absence of Time altogether.[34] Or Jarvis conflates a coherent understanding of 'timelessness' (*absolute* sameness) with several descriptions of continuity that rely on 'chronologically distinct eras' for their identification. Yet coherent 'timelessness' precludes the possibility of distinct eras along with 'most recent' moments and 'continuous' battles, all of which resolve only against some basic linear vision of Time. Finally, 'rupture' as described relies on elements of both 'timelessness' and 'linear time', in that it requires stability and sameness before the rupture and transformation and progress after the rupture itself—which in any case sounds much more like a historical 'turning point', the 'dawn of a new era', or a moment in which stability is renewed rather than a *gap* in Time itself.

Jarvis has plenty of company. The post-structural orthodoxy in IR kettles a variety of temporal ideas under the glib terms 'linear time' and 'timelessness', both of which are associated with the nation-state and the international status quo.[35] We are told that 'radical' political and social theories 'rupture' or 'transform' 'linear time', but by proposing better ways forward they actually proffer turning or inflection points in a particular and linear series of events (see Chambers 2011:198). We hear that a 'pure event' of 'becoming' does not 'belong to an already established, linear movement' because it pulls 'the body in different directions at the same time, into the past and into the future' (Lundborg 2011:3–4), yet linearity pro-

[33] Other reviewers find them 'ultimately separate' because Jarvis does not examine political practices in addition to discourse (Aradau and van Munster 2012:107n8). I think the problem is just the opposite—there is far too much conceptual intermingling for Jarvis' trio to comprise a typology.

[34] E.g., Jarvis (2008:39) cites Gilpin's and Modelski's cyclical visions of politics (see Hom and Steele 2010:276–77) as examples of timelessness.

[35] In a recent article with Brent Steele (Hom and Steele 2010), we occasionally employ an unexplicated 'linear time', although we make use of further modifiers such as 'progressive' to clarify the meaning. We are not, however, specific enough; nor do we rigorously distinguish between Time and temporality, as done in this project.

vides the root metaphor that makes 'pulling' in 'different directions' possible.[36] And riffs on Derrida's (1974) 'trace' oppose spoken 'linear time' with 'becoming' (Manning 2004:72 n17), but nothing about 'linear' opposes the sense of transforming from one state to another, or the idea of a trace. Quite the opposite, something cannot become something else without some linearised sense of before and after, and a trace is either a linear motion—as when I trace an image on paper—or something 'left over' from an earlier moment, once again in some basic linear flow.[37]

Elsewhere, postcolonial theorists contrast linear time with indigenous experience, in which '"time is not linear but cyclical. The events of the 'past' are not simply history, but are something that directly effects the present and the future"' (Shaw 2008:110, 74; Stephens 2007:169; cf. McClintock 1992:85, 91). This is a spurious—if exceedingly common—opposition, since a *cycle* refers to an undulating *line* or sine wave.[38] The problem here is not linearity, but a positivist view of history, since linearity facilitates rather than precludes the implication of the past in the present and future by underwriting continuity. Or we hear that unspeakable trauma disrupts heroic, national, and linear 'time' while its alternatives rely on the still-linear idea of 'encircling' the trauma by repeatedly 'returning' to its site as an act of resistance (Edkins 2003:15; see also Ferreira and Marcelino 2011).[39] Scholars occasionally qualify 'linear time' by modifiers such as 'bounded', 'singular', 'unified', 'rational', or 'homogeneous' (see Shaw 2008:21, 161; Stephens 2010:37; Edkins 2003:229); or by linking it to another entity: 'the time of' the nation-state, progress, history, sovereignty, standard political processes, patriarchy, capitalism, and/or modernity (see Lundborg 2011:78, 86; Shaw 2008:74, 165, 170; Stephens 2010:34; Edkins 2003:xiv, 16; Shapiro 2000; Dankoff 2011:261; Dörre 2011; Gallagher 2012:76). Yet what unites such challenges is an opposition to something inadequately explicated as 'linear' coupled with a proposed alternative that re-

[36] It is also hard to understand how the pure event refuses 'distinctions between before and after' but makes use of 'the past and future', unless Lundborg relies on an unacknowledged distinction between tensed and tenseless grammar. Additionally, it seems redundant to agitate against 'linear time*lines*' without further elaboration (Lundborg 2011:3, 12, 29).

[37] Similarly, Walter Benjamin (2002) proposes 'constellations' of history as 'non-linear' interrelationships, even though constellations cannot resolve without the linear connections produced by the Gestalt effect.

[38] If Time itself were actually cyclical, or more precisely circular, we would live our lives over and over *exactly* as we had before, which would preclude apprehending this very phenomenon. For this reason, espousals of a truly circular vision of Time *per se* are infrequent, drawing further suspicion to any proposed dichotomy between modern 'linear time', and pre-modern 'cyclical time' (e.g. Carvounas 2002; cf. Adam 1990). Additionally, under magnification circularity appears more and more rectilinear.

[39] In the case of trauma research, it is hard to understand how the unspeakability of trauma, which is what 'ruptures' Time, can also produce 'trauma time' (Edkins 2003:15; Ferreira and Marcelino 2011). For a critique of this way of thinking about the 'linear time' of the state, see (Suganami 2008:352)

mains thoroughly linear, albeit inadvertently so.[40] Whether or not these actualise rhetorical, poetic, or political effect, they cannot challenge 'linear time' if this refers to some basic serial quality of Time itself.

Although I have been critical of certain peculiarities of its conduct, I think the critical discourse in IR has great merit and can be readily clarified if its various 'linear' targets and its proposed alternatives receive more precise formulations. On its own, 'linear' can indicate 'a finite segment, an infinite line, an indefinite line, a braid or multistranded line' (Greenhouse 1996:20), as well as a variety of shapes (see Kristeva, Jardine, and Blake 1981:16).[41] For example, all of the images in figure 2 (see below) are linear. Some are *uni*linear (a, b, f, g), some *multi*linear (c, d, e), some *recti*linear (a, b, c, d), and some *curvi*linear (e, g). Even (f), which mostly defies description, still benefits from the addition of the prefix 'uni-', since we then know that we are referring to a singular if brambly connection. Albeit unwieldy, embracing these additional modifiers at least clears up *which* 'linear time' is under attack, which in turn facilitates a more intelligible elaboration of the various temporal advantages and capabilities that attend the nation-state and other instances of political domination. For examples, general claims about positive change present *linear*-progressive temporality, while claims about unified improvement present *unilinear*-progressive temporality. Claims that progress is accelerating employ a *unicurvilinear*-progressive temporality; and those that posit stable progress, a *unirectilinear*-progressive temporality.

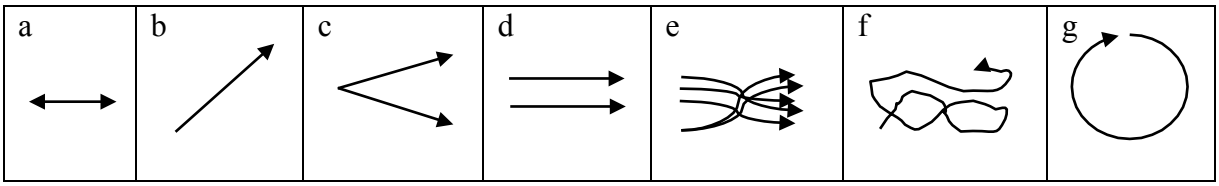

Figure 2: Varieties of linearity

Similar problems stalk attributions of 'timelessness' in IR.[42] In some cases, 'timeless' refers to qualities similar to Jarvis' account (Hobson 2002:30; Carvounas and Ireland 2008:162; Elman and Elman 2008:359; Dörre 2011:72ff). In some cases, it associates with

[40] Only very rarely do such works genuflect that 'the problem is not linear time *as such* but the way in which it works to present a view of the world as a *totality*' (Stephens 2012:56).

[41] In Kristeva's (1981:17) too rare example, 'linear' indicates 'time as project, teleology, linear and prospective unfolding; time as departure, progression, and arrival'—although this in no way exhausts its possible meanings.

[42] In cognate literatures, both 'linear time', 'cyclical' or 'circular time', and 'timelessness' are much more precisely explicated (see Nietzsche 2001:§341; Pletsch 1977; Sorabji 2006:107–08, 184–85).

universally valid orders, axioms, logic, or scientism more generally (Rosenberg 1992:132; Rosow, Inayatullah, and Rupert 1994:184; Woods 1995:164; Bartelson 1995b:261; Barnett 2002:100, 2011:153, 158; Hobson 2002:10–12; Wight 2005:44; Lawson 2006:415; Friedrichs and Kratochwil 2009:705; Tregenza 2011:372). In others, it refers to transhistorical continuity or to an absence of historical context (Palmer 1980:357; Agnew 1994:72; Sylvester 1994:117; Rosow 1994:8; Thomson 1995:218, 222; Buzan and Little 2001:26, 28; Teschke 2003:42, 137; S. Smith 2004:505, T.W. Smith 2004:21, 108; Hudson 2005:14; Kratochwil 2006:12; Lawson 2006:406; Neal 2006:42; Friedrichs and Kratochwil 2009:705; Hobden and Wyn Jones 2011:138, 142).[43] In still others, it refers to historical rhythms, cycles, or recurrence (Jervis 1991:45; Milner 1991:70; Pollins 1996:105; Pollins and Murrin 1999:431n7); or more specifically to the 'monotony' of 'reproductive' power relations (Hoffmann 1959:350) or to the '*regular beat of a series*' of long-wave cycles (Hobson 2002:30). Yet universal and transhistorical qualities indicate that something is valid at all or most 'times'; while cycles, recurrence, reproduction, and regular rhythms all resolve against a linear sense of Time. Thus, it is unclear how any of these invocations actually refer to the absence of Time.[44]

Alternatively, we find references to the 'timelessness of …', including political realism (Buzan 1996; Hobden 2002:53–54; Fierke 2005:51; Barder and Levine 2012:603), the 'inevitability of the international problematic' (Patomäki 2002:167–68, 196), or a 'state-centred space' that contains social, political, and economic life (Agnew 1994:71, 77). Yet realism is at most transhistorically valid rather than outside Time; it is unclear how something can be bound to happen if there is no passage of Time; and it is hard to imagine how modes of life that rely on interaction and process can occur without the passage of Time, regardless of their territorial container. Such constructions are analogous to the 'linear times of …' already discussed, although the fact that the two sometimes coexist is troubling since it leads to unanswerable questions like how the 'linear time' of the nation-state could be produced within its 'timeless space'.[45]

[43] Steele and I are also guilty of this conflation (see Hom and Steele 2010:280). Conflating transhistorical continuity with timelessness can lead to strange formulations, such as a '*timeless* world in which concepts travel easily back and forth *through the years*' (Thies 2002:364 emphasis added).

[44] Elsewhere, 'timeless' mingles with a strange lot. It associates with 'seminal' (Rubin, quoted in Osiander 2001:264n33); provides neorealism's 'alleged … sense of truth about international anarchy and national sovereignty' (Luke 2003:102); describes 'language, religion, or ethnicity' (Moravcsik 1997:525n40) or ideal types that are 'constantly and consciously reproduced' (Teschke 2003:79); or locates a *historical* origin that provides a stable heritage (Weldon 2006:194). At its most incoherent, 'timeless' qualifies 'time' itself: 'timeless time' (Castells 1996:433–34; which is critiqued for several things but not for conceptual incoherence in Hope 2006:288–92).

[45] Much like the linear straw men, 'timelessness' also features in IR oppositions that are not always apposite. For example, it is not at all clear how 'discontinuity' and 'liminality' contest 'timelessness', especially if

On rare occasions, IR presents 'timelessness' coherently as the absence of any change or passing (e.g. Alker and Biersteker 1984:137; Bartelson 1995b:256; Griffiths 1995:42–43; Fierke 2003:84; Friedrichs and Kratochwil 2009:705).[46] Other invocations are suspect because the field is *thoroughly* temporalized in that any accounts that interpret series of events; explain processes; offer conjectures about the past, present, future; or discuss *any change* necessarily deal in sequence(s) and therefore cannot be coherently 'time*less*'. As Kimberly Hutchings (2008:93, 97; see also McIntosh 2006:19) notes, 'even the most static and repetitive accounts of how international politics works' assume and reproduce 'some temporal patterning'. The problem is not that mainstream IR is actually 'timeless' or 'atemporal', but that it rarely acknowledges the temporal visions contained within its theories.[47]

These examples suggest that IR provides few if any coherent ideas about what 'time' means. We have various temporal metaphors and 'times of …' but almost no coherent explication *of Time itself*, whatever that might be. In light of such careless, variegated, and internally inconsistent wordplay across the field, it is unclear whether most IR scholars have thought about Time thoroughly enough to provide an adequate framework for understanding its role in international political phenomena or their study.

Times that work

However, hope can be found in two examples notable for their incisiveness and clarity. Although neither explicitly identifies the tradition of the problem of Time forwarded in this project, R.B.J. Walker and Kimberly Hutchings both make key contributions to our understanding of Time in international politics. Walker's *Inside/Outside* (1993) is a seminal call to clarify the place of Time in IR. It argues that the legacy of political theory in IR works to constrain 'all intimations of a chronopolitics within the ontological determinations of a geopolitics', by which Walker (1993:6; see Wight 1966) means the assignment of unilinear-progressive and cyclical-violent temporalities to the domestic and international realms, respectively. Walker (1993:62–63, 2009) believes that the field's tendency to treat this interpre-

none are precisely explicated (Mälksoo 2012:485), or how cycles and rhythms provide 'timeless' alternatives to 'linear' visions (Jervis 1991; Jarvis 2008).

[46] What scholars often seem to mean is the sense that the entity in question is immune from the problem of Time, although very few formulate this explicitly. The closest references are Morgenthau's (1962:48, 105, 3), to things being 'safe from the vagaries of time'; and Griffiths (1995:42–43), to Morgenthau's hunt for 'truths … that are valid *regardless* of time and space'.

[47] Otherwise, the International Studies Association's call for proposals for its 2014 annual convention would be quite curious. It justifies the themes of space and geography by acknowledging that scholars across various methodological camps have long been sensitive to temporality (see Iqbal 2013). Either there is an enormous misunderstanding dividing the field (not beyond the realm of possibilities), or loose wordplay has proliferated to the point of absurdity, where IR scholars are sensitive to temporality in their 'timeless' theories.

tation as an *a priori* severely restricts theorists' ability to imagine genuine alternatives to political dilemmas. For him, this metaphysical move imports value-laden distinctions between being and becoming, stability and contingency, predictability and indeterminacy, or presence and absence into IR. Together they dictate that we treat 'stasis and change, being and becoming, or structure and history as mutually exclusive oppositions'; so that to overcome the vagaries of life in Time we must first fix and order space (Walker 1993:106).

My research builds on Walker in two ways. First, he frequently identifies the tendency in IR to treat Time 'as a *problem to be overcome*' before we can speak of politics at all (Walker 1993:40, 4–6, 43, 112 emphasis added, 2009:8, 25–26). Yet because his focus remains on grand *solutions* to the problem of Time, such as the 'progressive realisation of universality' or 'fixing a home for man in space', Walker (1993:75) does not explicate the problem fully. I agree with him about the presumptuous delimitation of political possibility, yet the *original* presumption that Time is a malevolent force remains more a silhouette than a fully realised figure. Therefore, I try to articulate Walker's gesture by connecting it to a social theoretical account of Time that explains how it becomes a problem in the first place. Second, Walker insists that much work remains to understand fully the many philosophical assumptions constraining IR. My project responds to this call by unpacking and analysing the temporal assumptions implicated in IR theorising.

Whereas Walker usually pairs Time with space in a broader critique, Hutchings' *Time in World Politics* (2008) is the first work in IR dedicated exclusively to Time. With considerable breadth, she finds latent temporal patterns in Western political philosophies, contemporary IR, and international political theories. The majority privilege a homogenised and unified vision of Time that precludes the possibility of multiple, co-existing, and diverse visions, or 'heterotemporality' (Hutchings 2008:4). She also emphasises the temporal 'location' of the writer: international theorists claim privileged knowledge and thus interventionary legitimacy in contemporary affairs, and propose ways to 'shape' the course of events by some unified 'world political time' (Hutchings 2008:3–27).

Hutchings' analysis turns on the classical distinction between *chronos*, understood as orderly, universal, and determinate flow; and *kairos* (henceforth, *C/K*), understood as a moment of opportunity in which transformations can be initiated (Hutchings 2008:5–6). Successful action in *kairotic* moments holds the potential to reshape, redirect, or otherwise requalify *chronos* in the service of the actor's aims. One particularly innovative and striking benefit of Hutchings' account is to show that this interplay between *chronos* and *kairos* applies to international theorists just as much as political actors. Theorising itself becomes a

'timely' activity in her hands—a contextual account that identifies a propitious moment in the status quo and proposes how to intervene in that moment for political effect.

Hutchings' (2007:82–88, 2008:154–77) alternative to unified Time flows from the Deleuzean idea of 'becoming'. Time-as-becoming moves beyond the *C/K* antithesis, and its tendency to 'close' down world political 'time', by insisting that human time is necessarily 'heterotemporal' (Hutchings 2008:83). Hutchings' position here intermingles with some the critiques of 'linear time' discussed earlier, although her exposition is markedly clearer and more coherent because she targets Time's putative unity instead of its 'shape' and thereby keeps 'becoming' on firmer metaphorical footing.[48] This care, along with the innovative use of *C/K*, gives Hutchings' work a theoretical traction unique in IR discourses on Time.

Yet despite significant analytical benefits, *C/K* obscures the importance of the problem of Time by including it on both sides of the distinction. *Chronos* includes life-cyclical, profane, and natural 'times' as well as 'the maenad Fortune, an irrational and irresistible stream of happenings' (Hutchings 2008:6, 34, 8). *Kairos* includes novelty and the disruption of order and predictability' (Hutchings 2008:7, 30). Furthermore, both *chronos* and *kairos* include solutions to the problem of Time. Homogeneous *chronos* replaces Time's natural wildness with an orderly and neutral medium, while *kairos* directly challenges its link to discord and dissolution. Although Hutchings (2008:24–25n5) describes it as 'a creative force in its own right, intervening in relation to objects and events', *kairos* is more like a rare moment when *the creative and discordant force of Time in its own right* can be tamed by human action. This challenge to *chronos* relies on the assumption that *chronos* is the primary order of Time or a temporal pattern 'inscribed in the universe as a whole' (Hutchings 2008:31), rather than itself a desired alternative to the problem of Time (see Gunnell 1987). Such an assumption is difficult to sustain in light of the problem of Time's deep historical roots. Rather, the *C/K* distinction marks two different attempts to overcome the problem of Time with a preferred temporal vision. This point does not diminish much of the gains made possible by *C/K*, but it does bear on the relationship between my theoretical framework and hers, a recurring theme over the next two chapters.

With the exceptions of Walker and Hutchings, IR scholars are largely inattentive to Time or conflate it with interpretations of experience. As a result it remains exceedingly difficult to discern what theorists mean when they refer to 'time'. Furthermore, IR consistently undervalues the tradition of the problem of Time hiding in plain sight. I can see no way to

[48] After all, the opposite of hetero- is homo-, not linear-.

remedy these shortcomings with the resources currently provided in the literature, so this project proceeds in a different direction that I hope can contribute to IR's engagement with Time, provide some intelligibility to its plethora of 'times', and respond to and build upon Walker's and Hutchings' important works.

Plan of the thesis

However, elaborating and advancing a fuller understanding of Time in IR theory necessitates some conceptual preparation. The problem of Time remains largely metaphorical, cultural, and presented in humanistic terms. Although I have no prima facie quarrel with this situation, drawing out the problem of Time in IR theorising as a social scientific activity will become more feasible after a bit of bridge building. Therefore, I divide the thesis into two parts. Part I, comprised of chapters one and two, presents my two primary wagers and develops a theoretical framework for explicating and explaining various 'time' utterances. Part II then uses that framework to cut into several important moments in IR theorising that reveal its deeply embedded relationship with the problem of Time.

Chapter one uses Elias to emphasise the dynamic, active, and relational aspects bound up in any substantive concept of 'time'. Rather than beginning with 'time' as an objective idea, Elias proposes that we begin with *timing*. This offers an immediate analytical advantage that I leverage further by showing how it can provide theoretical backing to the problem of Time and a framework most relevant to the analysis of international politics.

Chapter two identifies a specific subset of timing in narrative responses to the problem of Time. When Time 'brings' surprising and otherwise confounding changes that threaten our understanding of how the world works, we configure narratives that order some elements of experience in a meaningful, serial whole. The *narrative theory of action* posits that these processes obtain not only in retrospective stories but also in lived experiences, where humans in 'real time' rely on the intelligibility provided by narrative *to time* their existence. I also show that narrative relies on timing techniques that produce temporal visions, which can then become reified into either the malignant or benign varieties of 'time' utterances that comingle in IR discourse. I conclude this chapter by summarising the overall argument of Part I and reflecting on its implications for an analysis of IR theory.

In Part II, I work through the implications of these wagers by cutting into IR theorising four times. First, I explicate IR as a narratively constituted vocation through an examination of three instances of surprising or destabilising international political events and IR scholars' reactions to them. This demonstrates that when confronted by discordant change,

IR decries the problem of Time and develops a narrative response. In all three examples, scholars cope with shocking change by labouring to emplot it within an intelligible story about the world of politics and the activity of scholarship, which effectively re-insulates theory from the ravages of Time as a condition of its disciplinary viability.[49]

These very human responses to the problem of Time set the stage for two more cuts. In chapter four, I address prominent methodological recommendations for how to 'do' IR theory. Despite great variety, in each scholars use narratives about less 'Time-bound' realms to reason about complex and unstable phenomena in the fluid world of international politics. Here IR theorists move beyond coping with their temporal existence to attempts to placate, manage, or tame Time as a prerequisite of scientific knowledge. This suggests that a sign of methodological viability is the capacity to respond effectively to the problem of Time with narrative temporality.

Chapter five complements this methodological argument by unpacking the narrative and temporal aspects of a variety of explanatory forms in IR. Regardless of its scientific or theoretical claims, each explanatory form presents a coherent and comprehensible sequence that renders some phenomenon more intelligible as a condition of its theoretical viability. If chapters three through five are convincing, they should contextualise IR as a *narrative timing project* whose viability depends on how adequately it can respond to the problem of Time.

However, one major sub-field of IR is conspicuously absent in the argument so far. In chapter six, I cut into quantitative research, which presents an especially hard case for my narrative timing framework. Because it relies on supposedly 'timeless' mathematical techniques, this expansive literature seems most resistant to an argument that IR theorising is a narrative or temporalized activity. However, by emphasising the narrative assumptions, dependencies, and features of core statistical techniques, I bring quantitative IR within a narrative ambit and explicate how hard the sub-field labours to preserve its symbolic connection to timeless, universal logic when confronted with Time-bound phenomena. Finally, in the conclusion I recapitulate the main contours of the thesis and reflect upon my wagers' payoffs and implications for further research on Time in IR as well as for the Time-bound vocation of IR theory.

[49] I use 'viability' instead of 'possibility' because I am making a claim about IR's *cultural* or *practical* orientation rather than the *logical* conditions of its existence.

Part I
Timing

1
Timing and the problem of Time

Time changes everything except something within us, which is always surprised by change.
– Thomas Hardy[1]

Introduction

Showing how IR theory relates to Time requires more preliminary work because neither IR nor cognate literatures currently provide an adequate toolkit with which to proceed. Additionally, the problem of Time receives insufficient attention in extant treatments. Therefore, we need an explicitly theoretical account that elucidates what it means to speak of 'time', that locates the problem of Time in IR discourse, and that shows how all of this connects to international politics. In this chapter, I develop my own implements over three sections. First, I introduce Norbert Elias' social theory in order to escape the well-worn ruts that steer many engagements with Time. Elias contends that references to 'time' are inseparable from and predicated by timing activities. I then draw some important implications out of this straightforward idea. Although Elias' approach is unique in the time literature, it does not include an explicit account of the problem of Time, so my second move is to show how timing activities can produce this. My final move is to argue that this framework competes well against the alternatives introduced in the introduction and thus poses a more appropriate Time for international politics.

Timing

We can better understand the many utterances of 'time' through a simple, powerful idea introduced by Elias. Largely neglected in contemporary social and political thought,[2] Elias' *Essay on Time* (2007a) offers a brief but intriguing argument that focuses on the dynamic sources of 'time' utterances. However, since his exposition is largely historical and struc-

[1] Related in (Flower 2007:254).
[2] Although Linklater (2004, 2005, 2007b, 2010, 2011a, 2011b, and especially 2012) is almost single-handedly changing this.

tured like a spiral that returns upon itself several times, and since he also elides the problem of Time, I will take three steps to connect his thinking directly to the concerns of this project. First, I provide a brief summary of his basic argument. Second, I show how Eliasian timing can be extended toward IR and international politics. Third, I respond to several objections that may arise as readers progress through the first two parts.

Eliasian timing

Elias contends that before it receives conceptual development or explicit theorising, the noun 'time' symbolises various features of timing activities and thereby attains a range of meanings. The *source* of 'time', in other words, is found in *timing*. This is also the basis for our difficulty in theorising it: 'one still very widely attributes to "time" itself the properties of the processes whose changing aspects this concept symbolically represents' (Elias 2007a:61). Whether or not it holds any weight as a metaphysical concept, a natural dimension of existence, or a phenomenological 'occurrence directly accessible to sense-perception' (Elias 2007a:84); 'time' is first and foremost a social construct built up from linguistic representations of dynamic timing activities.

Before delving further into Elias' argument, it is important to note that he is interested in a specific question about Time, which we can summarise as follows: (1) 'How have humans come to have an experience of, conceptualise, and think in terms of 'time' as an existential entity?' We can understand this as a sub-question of the more general query: 'What is time?' We should also distinguish Elias' sub-question from more traditional (i.e. philosophical) sub-questions such as: (2) 'How is human experience of the world possible, and does this involve time as a condition of possibility?', or (3) 'Is time real?'. As will become apparent throughout this discussion, answers to each sub-question hold implications for the others. To my knowledge, Elias does not explicitly state that we should dispense with (2) or (3) altogether, but he does insist that the starting point for any rigorous and coherent understanding of Time must begin with (1), which is a sociohistorical rather than a metaphysical or philosophical question. Of course, as mentioned, Elias' answer to (1) holds implications for (3) and even (2) in some respects. His antipathy towards those modes of inquiry notwithstanding, this allows his sociohistorical argument to speak fairly directly to philosophical issues. After introducing Elias' claims, much of my work will involve extending and developing them toward the theoretical concerns that animate this project, so at various points this will require me to engage briefly with answers to (2) and (3) offered by alternative accounts of Time.

Elias (2007a:35, 43–44; see also Cauvin 2000) contends that if we want to understand Time's place in human experience, we need to begin by focusing on the epoch, quite recent on evolutionary scales but very old in cultural terms, when the growth in size and complexity of human societies necessitated the development of elaborate symbolic worlds and of the means to integrate and coordinate widespread and extended human activities, both with each other and with the natural world. Here is how Elias (2007a:38–39 emphasis added) describes both 'time' and 'timing': 'the word "time", one might say, is a symbol of a relationship that a human group … establishes between two or more continua of change, one of which is used by it as a *frame of reference or standard of measurement for the other (or others)*'. Thus, 'time' originates in timing, which is itself a product of substantial 'intellectual synthesis' (Elias 2007a:60–61). The relations between change continua that Elias mentions are ones of *integration* and *coordination* (Elias 2007a:43–44, 62, 86, 136). When they require conscious decisions and effortful actions, Elias (2007a:41–42) calls this 'active timing'. Passive timing, by contrast, 'requires no decision' and so little effort that it occurs almost subconsciously (Elias 2007a:43). This is either because the change continua being timed are highly amenable to coordination or because the activity in question possesses a history of successful active timing that by repetition and institutionalisation has become almost 'second nature' to those doing the timing. Western Standard 'time' is a perfect example. It requires almost no effort, just a quick glance at the clock, whose readout is so conventional that we have simply come to think of its display as Time itself, although it is no more than a graphical division of a particular change continuum that we compare to any number of other continua (that we use *to time*).

Elias posits that active timing first emerged as social groups developed agricultural practices that benefited from coordination with seasonal variations. Agricultural civilisations subsequently attached religious significance to both recurrent and unique changes in the natural environment due to their impact on active timing, which concomitantly became the concern of priesthoods (Elias 2007a:42–44). As timing became necessary to societal survival and development, 'time' came to feature more and more in symbolic systems. This was abetted by the figural qualities of human language that influence 'the convention of speaking and thinking in terms of reifying substantives' rather than dynamic relationals (Elias 2007a:43, 1989c:342).[3] In other words, human capacities for symbolic language transposed features of

[3] Elias' interest in the language of 'time' should not be confused with the analytic philosophy of time literature reviewed in the introduction. Rather than how we *should* speak about time if it is to have metaphysical status independent of human understanding, Elias is interested in how language represents dynamic experiences.

timing activities into attributes of the noun ‘time’. Over centuries these transpositions settled into a multifaceted conception of ‘time’. Understanding Time more fully thus depends on recovering the relationships constituted by timing as well as drawing the connections between these activities and their symbolic ‘time’ utterances.

Two points in Elias deserve further investigation in order to prepare the ground for an extension of his ideas about timing. First, we need to elaborate ‘change continua’ because much of Elias’ and my own arguments hinge on them and because his references to them contain glimmers of a more expansive understanding of timing than he acknowledges. A continuum of change is any collection of changes, ‘developmental continuit[y]’, relatable ‘host’ of differences, or the ‘succession-aspects’ between events (Elias 2007a:46, 39, 110). This includes seasonal variations, physical motion, and mechanical processes that we usually associate with time reckoning; but there is nothing in Elias that precludes hosts of differences quite different from the standard reckoning examples. Any related (or relatable) array of experiential or conceptual objects might constitute a change continuum—it depends only on whether someone establishes some connection between two or more entities.

Now this connection can have a temporal character, or a ‘when-aspect’ (Elias 2007a:85), but this is not a *necessary* condition of timing or the ‘time’ it produces. What matters is that it be *temporally related* to some other change continuum. For Elias, it is the relating activity—not the thing in itself—from which the thing called ‘time’ springs forth. For example, a painted portrait of President George W. Bush is a spatial rather than a temporal change continuum of different colours, brushstrokes, and line-work whose overall vision I apprehend so quickly that I do not ‘sense’ or ‘experience’ the passing of Time—I simply view it and, thanks to Gestalt psychology and my familiarity with American politics, realise nearly instantaneously who it depicts. However, I can relate President Bush’s portrait in a way that establishes some temporal connections between the changes. For example: ‘It was when I was looking at Bush’s hair that you came into the room, then when I was studying the brushstrokes used to depict his blazer you coughed, so as a consequence I had to refocus on what I was doing’. This account gains temporal features not from any intrinsic temporality of the portrait but from *the way in which I relate it* to the person entering the room and coughing—it is the inclusion of such phrases as ‘when I was looking’, ‘when I was describing’, and ‘as a consequence’ that imbue the *relation* between Bush’s portrait and the person who enters with temporal features.

The fact that some change continua come with built-in ‘when-aspects’ seems to presuppose an independent temporal axis, which implies the circular proposition that there is

some ‘time’ that comes before timing and ‘over’ which changes are continuous.[4] However, the presence of temporal change continua does not entail a single, independent axis or dimension of Time. At most, the presence of temporal change continua suggests multiple axes or dimensions—that is, a multiplicity of ‘times’—which we still must synthesise and coordinate in order to render them amenable to social uses. Moreover, this purported circularity need not trouble Elias because his investigation is sociohistorical (sub-question (1) above: how did this come about?) rather than philosophical (sub-question (2) above: what are the logical conditions of possibility of this experience?). Yet one implication of his argument is that we can only perceive ‘over time’ by comparing the first continuum to another, which provides the standards for identifying and locating the changes of interest in a sequence. I take it to be a crucial philosophical implication of his sociohistorical explication of ‘time’ from timing that the condition of possibility of a sense or concept of time is not just the existence of *some change continuum*, but rather *two or more relatable change continua*. Elias (2007a:59, 85, 110) at times weakens this condition, not least by his allowance for temporal change continua. However, he is also quite explicit that ‘one could not speak of “time” in a universe which consisted of one single sequence of changes. If one lived in a single-strand universe of this kind one would never be able to know or even ask *when* anything happened’ (Elias 2007a:59).

A person can be considered a change continuum, since the human body houses any number of changing materials and biological processes. As Elias (2007a:82) points out, when a human being is supposedly ‘at rest’, ‘[y]our heart is beating, you are breathing, you are digesting; your cells are growing and decaying. The change may be slow, but you are continuously changing in “space” and “time”—on your own, while growing and growing older, as part of your changing society, as inhabitant of the ceaselessly moving earth.’ Moreover, ‘if they stop changing for good, … people cease to be people’ (Elias 2007a:60). This locates human *beings* as dynamic change continua in a teeming world in which, despite the appearance of much stability and persistence, change is ubiquitous, if highly varied in pace and scale. Elias also says that timing originates in intellectual synthesis, so it is important to point out that the human mind is a change continuum as well. Timing involves at least three continua, then: the human mind that connects plus two or more continua of change that get connected (Elias 2007a:39). The key point here is that *there is no timing without human involvement*.

[4] My Eliasian reading of continuity ‘over time’ is that this just refers to the identification or evaluation of one continuum against a lengthier and/or more repetitive continuum.

For example, one may intentionally use one's 'own life as the standard continuum for timing other events': 'there is oneself as the person who integrates and times; there is oneself perceived as a continuum of changes from birth to death and, in that capacity, used as a standard continuum; and there is the host of other changes which one measures in terms of the span of one's own life' (Elias 2007a:39). This poses self-identity and autobiography as examples of timing activities. We usually characterise self-identity as a sense of personal continuity or 'ontological security' that persists 'through' or 'over' time and autobiography as a text (Steele 2005, 2008; Freeman 1993), but both involve a thinking subject who integrates and coordinates his personal change continuum with a variety of experiences in order to preserve or reproduce that sense of continuity.[5] It may seem as if the fact that this subject changes internally and visibly (we call it 'aging') indicates some extant axis of Time along which those changes *appear*. However, although we can *chart* the subject's changes along such an axis, we first have to construct it—where is this axis of Time if not in our minds or in the products of our minds' creations?

Second, language itself is a change continuum inasmuch as it is constituted by difference—be it the graphic distinctions between textual characters, the wide variety of sounds by which words are made, or the semantic variations that engender meaning (Elias 2007a:84). As such, language can be the object of timing, as when we compare speeches against a common standard to ensure that debaters receive the same 'amount of time' to make their case. But linguistic representation can also provide the timing standard if it is the continuum by which other changes are integrated and coordinated, as when an account of some situation indicates that we should act in one way and not another (Ringmar 1996; see Campbell 1998; Hall 1999; Steele 2005).[6] Finally, non-autobiographical language may be one continuum integrated and coordinated with others—with experiences and events—by the person who times, as when we work to configure an intelligible account of some phenomenon for an audience.

Language is actually more important than many other continua implicated in timing. It is the pivot between timing and time. Out of ongoing timing efforts, language produces the hypostatised noun 'time' and assigns it attributes (Elias 1989c:342, 2007a:33).[7] When timing

[5] In an Eliasian interpretation, the use of prepositions like 'through' or 'over' in relation to 'time' indicate that such continuity and coherence result from successful timing. They also hint at an antagonistic relationship to Time by suggesting that 'time' is some obstacle to be penetrated or overcome by a secure sense of self.

[6] Since it results from reasoning, this account is not only linguistic; yet it cannot be extricated from language, which conditions the kind of account possible and therefore the actions flowing from it.

[7] Moving from timing to 'time' is thus analogous to referring to a 'river flowing' or the 'wind blowing', which we do readily even though the noun and the verb in each pair are one and the same (Elias 2007a:36).

becomes ‘time’, the timing activity’s ‘instrumental character’ is disguised and embedded by its transformation into a naturalised object (Elias 2007a:36, 85). Much the same, time reckoning devices, which always develop as ‘instruments which people have created for quite specific purposes’, readily become abstract and generalised representations of time itself (Elias 2007a:85). This ‘substantival mode of thinking deceives us. It endows time with an existence of its own,’ even though time is no metaphysical a priori—in fact time is *nothing* more than the symbolic representation of timing activities (Elias 2007a:65 n17). In this way, ‘time’ exemplifies language’s capacity for ‘process reduction’ or the transposition of relationships ‘in a state of flux’ into ‘static conditions’ (Elias 1989a:193–96). This is how the vision of time as an autonomous figure, force, or dimension in the world comes into being.

Although Elias calls out ignorance of the link between ‘time’ and timing, he also understands this elision as a practical resource for coping with the vicissitudes of an increasingly complex existence. Time’s ‘fetish-character’ stems from language’s potential to represent ‘an intellectual synthesis, a connection of events, at a relatively high level of universality’ (Elias 2007a:61). As such, ‘time’ represents a ‘learned fund of knowledge’ without which humans would be hopelessly ‘involved’ in every minute demand of life and thus unable to achieve the ‘detachment’ necessary for reflective thought and further synthetic endeavours (Elias 2007a:54, 2007b). If we could not symbolise timing with ‘time’, our ‘capacity for learning connections between happenings’ would occur almost exclusively in the service of ‘pressing elementary needs of the moment’ and thus would severely constrain our capacity *to time more and more effectively* (Elias 2007a:54). Finally, ‘time’ is just the kind of ‘relatively disinterested and impersonal concepts of very high generality’ that allows human beings to benefit from social learning across multiple generations instead of relying only on individual experience (Elias 2007a:54).

The price of this social learning is that ‘time’ comes to seem as if it exists *apart* from humans (Elias 2007a:96).[8] Because timing and its symbolic representation are both social activities, their outcomes can become social facts that ‘refer to data which presuppose a plurality of interdependent human beings and, for that reason, have a relative autonomy and may even have a power of compulsion with regard to each of them singly’ (Elias 2007a:96–97). Social construction makes ‘time’ appear objectively real insofar as its symbolically constituted power seems independent of any human subject. This idea shares much with the psychological phenomenon of ‘externalisation’. A sub-set of transference, externalisation refers to

[8] Other examples include capital, money, and society (Elias 2007a:96).

an unconscious defence mechanism in which an individual 'projects' her own internal characteristics onto the world outside herself. Such characteristics include recollections, emotions, and 'ways of thinking' or 'cognitive styles' (Moore and Fine 1990:70), while externalised targets include other people but also 'all sorts of events and perceptions', and 'external reality' in general (Akhtar 2009:100–01). Externalisation further underscores the historical contingency of our parallel traditions of Time—both Western Standard 'time' and the problem of Time stem from predicates derived from particular timing practices that we came to think of as distinct from those practices and from ourselves. In the case of the problem of Time: 'For centuries the linguistic usage which enables people to refer to … cerebral functions by means of reifying nouns … has played havoc among the learned. It has given rise to a number of rather idiosyncratic mythologies in which symbols … *acted the part played in the older type of myth by gods or spirits*' (Elias 1989c:342 emphasis added). There is no proper content *of* Time, nor is the problem of Time natural to human existence. Rather, *'time' is whatever we say when we speak about timing activities*.[9]

Extending Elias

Because he aims at the naturalisation of Western Standard 'time' and its conflation with metaphysics, the majority of Elias' argument treats the usual suspects of time studies such as numerical reckoning techniques, seasonal variations and celestial movements, and their relation to mundane, agricultural, and monastic modes of social experience. Although this discussion contributes much to time studies, there is still more to Eliasian timing. In the timing-'time' link, he has uncovered the basis of a general theoretical framework for analysing the many and varied manifestations of 'time'.

Elias (2007a:60) seems aware of this when he writes that the variety of ways by which change continua may be synthesised are 'the reason why the concept of time is applicable to quite different kinds of continua of changes'. Yet for the most part, his essay does not extend beyond familiar examples and so explicates only the Western Standard side of the

[9] This point renders 'time' a fundamentally derivative concept. This might pose a problem for philosophers concerned with its (non-) existence but not for social and IR theorists, who routinely deal in derivatives—like 'security'—that are 'meaningless' without supplemental referents (Krause and Williams 1997:ix). Although philosophical realists might point out that none of this proves that there is not some Time existing 'out there' in the world independent of our minds, the point of Elias' sociohistorical answer is to show that what humans are talking or thinking about when they talk or think about 'time' is *just* this linguistic symbol of their relational activities and *not necessarily* some independent, existential feature or entity. This leaves Time as an intriguing topic for sorting through potential fallacies both epistemic (just because we cannot know something exists does not guarantee that it does not exist) and ontological (just because something exists does not guarantee that we can know it or engage it). For more on such fallacies, see chapter four (p. 151).

parallel traditions of 'time'. To incorporate the problem of Time more fully, I propose to extend Eliasian timing in four ways. First, I expand the explication of timing and 'time' slightly but significantly, and emphasise the importance of concord to timing. Second, I show why Elias' definition of 'timing standard' is too restrictive. Third, I develop the importance of concord to timing into the idea of a 'will to time'. Fourth, I show how theory can be thought of as a linguistic form of timing.

Expanding timing and 'time'

Recall that in Elias (2007a:85, 60) 'time' refers to the 'when-aspects of very different sequences' and emerges from timing, which is itself 'based on people's capacity for connecting with each other two or more different sequences of continuous changes, one of which serves as a timing standard for the other (or others)'. Here the phrase 'based on' suggests that people's capacity for connecting change continua is a general capacity by which the particular subset of timing arises. However, Elias' focus on the usual suspects of timing studies may encourage us to construe the subset of timing too narrowly. My wager is that humans may be involved in timing *whenever* they meet two criteria: (1) they relate *any* two or more change continua using one as a standard of coordination for the others; and (2) they use temporal language to refer to this activity. And given the empirical pervasiveness of 'time' utterances and temporal language (that is, how often criterion (2) is satisfied), it makes sense to remain open to the idea that whenever humans are actively establishing or have already established *concord* between multiple dynamic entities, they are engaged in timing. This wager entails treating timing as *potentially* identical with integration and coordination, depending on linguistic evidence from the empirical record.

Timing can occur in the midst of discord or simply where the potential for meaningful relationships is untapped. Where discord obtains, timing provides an alternative to dissention, strife, disagreement, and difference.[10] But in either case, as long as the continua in question are minimally amenable—tidy enough, not too complex, and possessing *some* intelligible features—or can *be made* amenable to coordination by abstraction, generalisation, analogy, or other intellectual operations, it is possible to time. Additionally, the verbs 'coordinate' and 'integrate', which Elias uses repeatedly, are quite capacious. To 'integrate' is 'to put or bring together so as to form one whole', 'to render entire or complete'.[11] And while 'coordinate' may refer to the fairly specific operation of placing or classing certain changes 'in the

[10] (Discord, N. 2013).
[11] (Integrate, V. 2013).

same order, rank, or division', it can also indicate a more general activity in which we 'place or arrange (things) in proper position relatively to each other and to the system of which they form parts' or 'bring into proper combined order as parts of a whole' in pursuit of a 'particular result'.[12] In both integration (the gathering) and coordination (the arranging), the standard of propriety depends upon the holistic vision being pursued. These activities thus include the standardised techniques of time reckoning as well as anticipation and prediction, which integrate and coordinate a future possibility with an extant vision of how things work. Going further, *any* dynamic processes by which we orient ourselves in the world is eligible if some measure of agreement, concurrence, or harmony results from purposeful human effort to gather together and arrange things that matter into an intelligible and meaningful whole for some purpose. To be a potential instance of timing, the activities in question need only be directed toward the establishment of *any* 'properties which sequences of continuous changes have in common, *regardless* of their differences in kind' (Elias 2007a:60 emphasis added).

This is an admittedly commodious rendering of timing, so it is necessary to specify one empirical restrictor lest my version of timing seem to encompass every human activity. The restrictive criterion is that in addition to integrating and coordinating more than one change continuum, to count as timing these activities must produce a temporal vision or 'time' utterance. For instance, when timing is successful—when we integrate and coordinate changes with good effect toward our desired goal—we might say that we had 'good timing', that we 'saw the future', that something happened 'at just the right time', that 'time was on our side', or that we 'used' it wisely. However, 'time' utterances are not limited to successful timing. When our efforts to integrate and coordinate change continua are less successful, we may not get settled, hypostatised predicates of the noun 'time' in ordinary usage because the activity is too fraught to admit of a recurring symbolic reference, but we still refer to our 'bad timing' or to the idea that things were going well until the 'passage of time' undid our arrangements (more on this below, see pp. 51). So although the presence of some reference to 'time' delimits what activities of integration and coordination can be treated as instances of timing, there is still great flexibility due to the ubiquity and multivalence of the word 'time' in ordinary usage. In pursuing timing in all its many manifestations, we seek only the combination of efforts to integrate and coordinate changes with *some* 'time' utterance, which may be positive or negative, a recurrent theme or a fleeting image, or a dimension, figure, or force.

[12] (Co-ordinate, V. 2013).

Redefining timing standards

Because Elias (2007a:84) focuses on well-known uses of physical phenomena for timing standards, his 'timing standard' is a change continuum that meets three criteria: it is repeatable, more reliable, and more controllable than human actions. However, the criteria for a timing standard need not be this stringent. To facilitate timing, a change continuum need only meet one or more of the criteria. Standards of coordination need not be repeatable or reliable, as Elias' (2007a:39) own imputation of autobiography as a form of timing suggests, since autobiography is non-repeatable. Alternatively, a continuum may be reliable but not strictly repetitive, such as branches falling under the weight of snow or the tendency of a certain leader to react to certain situations in predictable ways.[13] Finally, the continuum need not be *more* controllable than human action; it need only facilitate greater human orientation and control. Someone intent on timing may use almost any change continuum as a timing standard as long as she can use it to bring other continua to heel. Although some change continua (e.g. repetitive motions) conduce to timing better than others, this is not the decisive factor. Instead, as long as they elevate some useful continuum as the timing standard, people '*on their own initiative* establish more exact and reliable sequences as a standard for other sequences' (Elias 2007a:39 emphasis added).[14] The true benefit of more repetitive and consistent timing standards is that they can be used to time a wider variety of change continua than more idiosyncratic standards, but this is not to say that the latter cannot be used to time.

The prime example of general applicability is the mechanical clock, but it remains a *particular example* of the *general activity* that requires only *some* standard for bringing phenomena into concord (Elias 2007a:39). The serial perception of Time itself provides another example of basic timing. Although we tend to think of generally linear Time as something external to ourselves *along* or *through* which we move, this sense of Time is a product of timing. Intellectual synthesis encourages the phenomenological effect by which humans orient themselves in the world by 'remembering distinctly what happened earlier and … seeing it in their minds' eyes as a single picture, together with what happened later and what is happening now' (Elias 2007a:31). This is a more basic sort of timing that coordinates the chang-

[13] We then walk clear of snowy branches or decide our course of action by anticipating a leader's actions under the familiar conditions. When we succeed we are praised for our 'good timing', which is not a platitude but an indication that we have in fact *timed* snowy branches and challenging leaders.

[14] Note that here Elias has replaced 'repeatable' with 'more exact', which may acknowledge the tension between these passages.

ing mind with a continuum of external stimuli and facilitates 'the perception of events which happen one after another as a "sequence in time"' (Elias 2007a:31).[15]

The will to time

The importance of the standard by which concordant relationships are established suggests an asymmetric or hierarchical quality in timing. Here it bears repeating Elias' (2007a:41–42, 38–39) observation that in timing one continuum of change functions 'as a frame of reference or standard of measurement' for the others. Since active timing only arises for some purpose not otherwise fulfilled, and because it is only necessary where spontaneous coordination is absent, *imposition* is intrinsic to timing. Where continua coordinate spontaneously, we do not need to time at all. Where they do not, we have to elevate one continuum over others or else integration engenders chaos instead of concord. Furthermore, as a means of social orientation, timing 'presupposes the readiness of [a] plurality to *submit* to an integrating *authority*' who poses that standardising continuum (Elias 2007a:136 emphasis added). Thus, the human capacity to time relies on power and (self-) control.

Foregrounding this helps to explain the tendency toward unitary visions of 'time' that animates Hutchings work. The reason that international political theories usually forward unitary temporalities is that timing works by a will to integrate and coordinate against some standard. This is a sort of unification. I think that when Hutchings (2008:21, also 127, 152, 175) critiques the 'ideal of political time as a unified *and unifying* … present', she is referring to a vision of 'time' but also gesturing at the willful timing process that produces it.[16]

This point overlaps with other IR theories as well. For instance, we can easily adapt Robert Cox's (1981; Linklater 2007a) critical theory to Elias' emphasis on the self-centred nature of timing and point out that *all timing is for some one and some thing*. And regardless of whether they derive from timing for powerful, marginalised, or emancipatory interests, *all* 'times' are imbued with some qualities of hierarchy and control. In this way, timing and 'time' also overlap with classical and reflexive realism.[17] Because they derive from goals and interests and impose one continuum of change on others as the standard of coordination, all timing manifests a 'will to power' (Nietzsche 1982; see Petersen 1999), or what we might call a *will to time*—a purposeful effort to impose some standard of reference on otherwise

[15] Boyd's (2009:47) brief discussion of the evolution of successive apprehension lends Elias support from a biocultural perspective.

[16] 'Timing' occurs only twice in Hutchings (2008:30–31) analysis, although her exposition of the 'untimely' seems somewhat similar.

[17] Among numerous examples, see (Morgenthau 1945; Niebuhr 2001; Lebow 2003; Williams 2005; Steele 2007; Hom and Steele 2010).

uncoordinated change continua. If there is no linguistic production of 'time' without a background timing activity, and if all of these manifest a will to time, then every 'time' utterance symbolises some goals, standards, and an actualisation of will. Thus, all 'times' have a political dimension.[18]

Timing with theory

With its different characters and sounds, vocabulary and grammar, and statements and lengthier accounts, language is a change continuum that we use to orient ourselves.[19] In addition to its basic graphical and aural differences and their connections, without language we could not 'perform the kind of thinking which enables human beings to come to grips with the kind of problems that arise from everybody's coexistence with others' (Elias 1989a:213). We can also alter language to fit many circumstances—as when we construct neologisms, employ metaphors, or configure narratives to understand and symbolically represent new experiences (see Elias 1989c:378). Finally, language is the primary medium through which we communicate an intelligible account to others once we have developed it. All of these instances can be understood as timing activities.[20] In the first, language provides a ready coordinating standard; in the second, intellectual creativity expands language to accommodate a new situation; in the third, language integrates the audience insofar as it is legible, holds their attention, and presents plausible and intelligible information. All of these coordinate the presenter, the linguistic account, and the audience in an extensive moment of concordance.[21] They share a general affinity with the usual timing that we associate with clocks and calendars, although they are distinct *forms of timing* in their own right that we can differentiate by the types of continua used as timing standards. Clock- and calendar-based timing employ numerical, rationalised, and cyclical continua as the standard of integration and coordination;

[18] On this interpretation, the post-structural work on 'time' covered in the literature review, which refuses the hegemony of 'linear' or clock time, is itself an outgrowth of our 'capacity for establishing relationships' through standardisation, authority, and control (see Elias 2007a:38). No less than their hegemonic foils, dissidents *also* and *always* posit some 'better means of orientation and control' (Elias 2007a:104). Thus 'refusals' of 'hegemonic time' are actually contests between different timing proposals.

[19] Furthermore, it is a *temporal* change continuum inasmuch as the order and sequence of linguistic symbols (its 'when-aspects') are integral to its effectiveness—changing the order of letters changes the meaning of the word, changing the order of words alters the meaning of a sentence.

[20] When I speak English with another person, we both tacitly submit to the standardising power of this particular language.

[21] It may be argued that language does not time so much as enable action 'at the right time'. However, we cannot ascertain 'the right time' for a given action except within a model of the world, which is usually presented linguistically. It may be 'good timing' that we read or hear some relevant account of things just before we will need to act, but the account itself is also a case of 'good timing' inasmuch as it orients us in the world and shows us how and when to act. I expand on this theme in the following chapter.

ordinary language and narrative employ qualitative continua that may or may not also include enumeration, cyclicality, and a strict rational organisation.

To bring this point closer to the social sciences, we can think of descriptive, explanatory, historical, or theoretical accounts as instances of *timing* inasmuch as they are linguistic artefacts meant to establish this moment of concordance and to indicate how we can orient ourselves and go on in the world. Theory involves some combination of description, specification, explanation, hypothesis testing, interpretation, and/or problematisation, none of which are typically considered acts of timing. Yet Elias (2007a:43, 75) makes it possible to understand the activities involved in constructing a theory as instances of *active timing*—all theories are self-centred (constructed by someone for some purpose), willful, decision-laden attempts to coordinate relationships between change continua for purposes of orientation, integration, and control. One change continuum is always the 'intelligibilifying' mind (Suganami 1999), 'which flexibly mediates between a person's changing purpose and the rush of the changing world in which a person is placed' (Elias 1989c:343; Boyd 2009:48–49). The theory itself is a continuum of change, both as a process of refinement and as a finished product of language.[22] Finally, all phenomena of interest in the social world involve change on some level. Theory does differ slightly from other linguistic accounts by its standard of reference. While more general linguistic timing activities might rest on fuzzy or intuitive standards of plausibility, the theorist's training in logic, coherence, and rigor provides a relatively concrete and explicit standard by which phenomena are to be integrated and coordinated into a coherent synthesis. And because it is always for an audience, theoretical power is a question of how successfully a theorist can orient, integrate, and coordinate some continua of interest in a readily communicable way using such standards. Regardless of whether integration and coordination serve standards of correspondence with reality, analytic efficiency, self-reflexivity, problematisation, dissidence, or any other particular objective, whenever we attempt to make sense of the world, we engage in active timing. A person who describes, explains, recounts, or otherwise theorises is a *person who times*—it is just that they are timing using a different sort of change continuum as the timing standard.

In the case of the social sciences, scholars use theory to time phenomena that are themselves instances of collective and social timing. That is, scholars employ theory to orient their thinking about the world of international politics, integrate various international chang-

[22] Here I differ slightly from Elias (2007a:82–83), who argues that timing 'refers to relations of positions within a change-continuum which one tries to determine without abstracting from its continuous movement and change.' But *every* instance of theorising abstracts to some extent, as most theorists readily admit, and this represents a trade-off which further events may render problematic (see p. 91-93).

es, and coordinate their ideas with those changes, all of which are built up from related instances of orientation, integration, and coordination on the part of social actors. In the natural sciences, theorists provide the only source of timing, since natural phenomena that spontaneously coordinate do not involve beings endowed with capacities for intellectual synthesis and symbolic language and therefore cannot meet the criteria for timing laid out by Elias. This has the somewhat counterintuitive consequence that the social sciences are the only branch of the sciences that treats theory-exogenous timing (and thereby a 'time' external to the theorist).[23]

The condition of possibility for timing, which is the presence of two or more change continua that possess some relatable features, is also a condition of possibility for theorising. Theorists assume that the world possesses some bare minimum amenability to integration and coordination. A world constituted *fully and completely* of uncoordinated and unrelatable singularities would preclude the possibility of change *continua*, scholarship, theory, language, and action altogether.[24] Aside from this possibility, there exists great variety within the social sciences on the amount of coordination thought to obtain in the world. On one end of the spectrum is a radical vision of a purely 'deterministic' world, although it is unclear whether any scholars adopt this view. On the other end are 'relatively stable' but non-recurrent phenomena of interest. Somewhere in between lay 'probabilistic' assumptions, 'demi-regularities', and 'contingent generalisations'. Regardless, some minimal presupposition that there are parts of the world that we can bring into concord—that we *can time*—makes possible the generally applicable, practical, and/or meaningful knowledge about the world that theorists try to develop. When they do, they are *timing social phenomena*, albeit in a *form* different from the most familiar one of reckoning using a clock or calendar.

Potential objections to Eliasian timing

Ontological and Kantian objections

Both Elias' understanding of 'time' and my extension of his ideas go well beyond most common understandings of Time. Therefore, I will try to anticipate and respond to several possible objections to the discussion so far. Given his attentiveness to clocks and calendars, sceptics might conclude that Elias provides a backstory but poses no real challenge to settled

[23] This is directly related to and inspired by Gunnell's (2011:1467) argument that only in the social sciences can we have 'mind-independent' knowledge, since in the natural sciences *all* knowledge resides within the intellectual constructs of scientists. To be clear, social scientists deal with other peoples' timing and 'times', whereas natural scientists formulate a vision of time in the process of timing natural change phenomena.

[24] This is not to say that the world has its own 'time' or temporal order. Rather, if humans possess a basic ability to connect, as Elias claims, the world must also include some connectable elements.

understandings of 'time'. Timing may relate to 'time', so this objection goes, but 'time' remains that which we read on the clock, which simply taps into a natural, objective dimension or metaphysical a priori.[25] However, the idea that 'time' is *created from* social activities renders such conclusions untenable.

We often describe two events as 'synchronous' if they occur 'at the same time' as reckoned by a standardised clock or calendar. But as a phenomenon involving the question of 'when', synchronicity does not require Western Standard 'time'. It only requires the relation of two different continua of change (see Elias 2007a:60). If I run into someone on the street, our being on the same street 'at the same time' simply refers to the newfound coordination of our respective change continua, and I say that 'it was synchronicity that I ran into you' without reference to any standardised timing meter.[26] Furthermore, although a standard timing meter can help us identify two events as synchronous (they both occurred at 'noon'), its functionality depends on our ability to synchronise it with events of interest (saying that one thing occurred at 'noon' is saying that some event was synchronous with the clock hand's moving to the mark we call 'noon'). That 'synchronicity' has come to indicate a meeting of two change continua 'at a given time' on the clock is *accurate*, if we have a clock handy, but unnecessary; it *necessarily* indicates only some occurrence of *timing*—an integration and coordination of change continua, of which clock-based reckoning is only one example.

In spite of this, two nagging and related doubts may persist. The first is that timing activities which 'take some time', coincidences which admittedly occur 'at some time', or any experiences at all entail some extant, objective dimension of existence. One of the reasons that Elias emphasises the exclusively linguistic foundations of 'time' is to challenge this way of thinking. Western Standard 'time' resulted from extensive and extended Enlightenment sociopolitical efforts to develop mechanical devices that were accurate, precise, and reliable (Zerubavel 1976, 1977, 1985; Dohrn-van Rossum 1996; Landes 2000); just as any vision of 'time' at all resulted from extensive and extended sociopolitical efforts *to time* one set of changes or another. The power of Western Standard 'time' power resides in its ability

[25] In effect, such an objection elevates our sub-questions (2) and (3) over (1), see p. 28 above.

[26] Through repetitive usage synchronicity' has further come to indicate 'at the same time' on the clock face as well as a happy or at least non-threatening co-incidence. We refer to other, less welcome synchronous encounters as 'chance' or 'fate', but these words describe the same basic phenomenon—the coincidence of two change continua—in ways that suggest different normative valuations. For example, the recent Boston Marathon bombings (April 2013) produced 'time' utterances about the same occurrence—the explosion of the bombs—with very different normative inclinations. There was speculation that the culprits 'timed' the bombs to explode just when the most runners would be near the finish line (Evensen 2013; Slapout9 2013), while it was 'bad timing' that any particular individuals were injured at a specific moment and place in a race which spanned over 26 miles and multiple hours (Krause 2013).

to coordinate a wide variety of change continua by a single rubric, but such facility does not entail that a single axis of time exists 'out there' in the world. Rather, it marks a highly effective and useful change continuum that has been elevated over all the continua it coordinates by the linguistic transposition of highly consistent and repetitive *acts of reckoning* into objective predicates that make it possible to imagine a continuous, homogenous, and *objective dimension* of Time. The sense that there is only one Time and it is that which is reckoned by the clock also acknowledges its technological and material limitations—it can only time *in one way*. Insisting from this that there just *exists* an objective, unirectilinear dimension of time to which the clock corresponds and which supersedes other notions of time is an error based on technological hyperbole, 'a striking example of the way in which a widely used symbol, cut loose from any observable data, can assume a life of its own in common discourse' (Elias 2007a:99).[27] Not even the reliable celestial motion that inspired so many scholars of time could instantiate 'time' without first being usefully related to some social objective requiring further control than was previously possible (Elias 2007a:85).[28]

The second doubt is that our sense of 'time' is fundamental in the sense of a Kantian a priori. Although this is not the place for an in-depth comparison, there are several aspects of Kant's thinking on Time that draw immediate contrasts with the Eliasian version developed here. Kant treats time, like space, as a *form* of experience, an immediate relation to our senses, and an a priori intuition that makes it possible for us to have an experience of objects (or, we might say, 'for objects to appear to us'). However, the temporospatial form of experience is *not* an aspect of independent and 'absolute reality' but 'mere appearance' (that is, 'empirically' rather than transcendentally 'real), for no object that has temporal or spatial properties can be the same as the thing in itself (Gardner 1999:60–63; quoting Kant 2008:A39/B56). Intuitional experience—which is given to us—is also not the same as understanding, which concerns concepts (mental objects or things that we think about) and the features in common that *we establish* between them. We can think about concepts that have no experiential referent, but if they concern experiential objects then concepts must relate to a priori intuitions (Gardner 1999:44). Finally, Kant views the claims that Time is *uni*dimensional and that the idea of 'different times' must concern successive rather than simultaneous experiences and events as 'apodictic principles' (Kant 2008:bxxii, A31/B47; Gardner 1999:48).

[27] Additionally, proponents of this view must account for the vast diversity that attends the history of unilinear representations of time (see Rosenberg and Grafton 2012).

[28] See Ricoeur's (1984:63) reading of Heidegger, in which even a celestial cycle such as the solar day 'is not an abstract measure; it is a length that corresponds to our Care and the world in which it is "time to" do something, where "now" signifies "now that."'

Recall that Elias views 'time' as the *result* of linguistic reference to intellectual and practical activity. This central claim is difficult to reconcile with Kant's equally central claim that 'time' is part of the way in which objects are *given* to us in immediate experience. Elias is skeptical of claims about a priori intuitions, especially those that represent a high level of synthesis. Rather than the 'untenable … philosophical view' that a sense of 'time' is something with which 'totally autonomous entit[ies]' are naturally endowed, Elias (2007a:33, 32) thinks that humans are naturally endowed only with 'a general potential for synthesis—that is, for connecting events', and that 'all the specific connections which they establish and the corresponding concepts used by them in their communications and reflections are the result of learning and experience, not simply of each individual human being, but of a very long line of human generations handing on knowledge and learning from one to the other.'

He similarly takes issue with the 'unlearned discovery' that '"time" is a universal form of human consciousness' held by humans 'always and everywhere in the same way, without any learning and prior to any experience of objects' (Elias 2007a:52, 101, also 51). As mentioned earlier, even the presence of temporal change continua prior to timing activities is not enough to defend the imputation of a *singular and universal* sense of Time—rather, it can at most defend the imputation of a multiplicity of 'time sensations'. For Elias (2007a:50), the crucial question of 'time' is historical rather than transcendental/ philosophical: would humans really perceive 'everything in terms of time-sequences without even having worked out any time-meters'? When theorists forget this, it becomes possible to 'philosophise tirelessly' about something that is essentially a peculiarity of language (Elias 2007a:36, see also 62).

Additionally, there are ineluctable tensions between Kant's and Elias' technical terms. Kantian 'time' is an a priori intuition, which is always 'a representation of *one particular*, *individual thing*, "a single object"' or a '"singular representation"' (Gardner 1999:44 emphasis added; quoting Kant 2008:A32/B47, B136n). Elias' focus on multiple change continua and their relation by timing explains multiple representations of 'time', or simply multiple 'times' that refer to various activities and only come to seem like a single *thing* after generations of practical and linguistic sedimentation. Indeed, Eliasian timing and its resultant 'times' share more with Kant's conceptual objects than his a priori intuitions. A Kantian conceptual object is mediated 'by means of a feature which several things may have in common' (Kant 2008:A320/B377; Gardner 1999:43–44). This brings it near to Elias' intellectual basis for active timing, which—inasmuch as Kant insists that 'time' is an a priori intuition and *not* a concept—suggests a fundamental gap between the two.

To further underscore these differences between Elias and Kant, consider that Kant develops a transcendental/philosophical answer to sub-question (2) of the general query, 'what is time?', while Elias develops a sociohistorical answer to sub-question (1); each holds significant implications for sub-question (3): 'is time real?'. Kant seems to say that the external world is *given* to human consciousness in a single temporal form (immediate intuitions) and that we then make sense of experiences conceptually—i.e. synthetically—through categories of understanding such as causality, accident, or substance. So Time is part of the way that the world presents to us, although given that Kant demotes temporality to 'mere appearance' it cannot be said to be absolutely 'real' in the sense of being a thing in itself (Gardner 1999:44). I have spent much of this chapter presenting Elias' answer to sub-question (1) so here I only note that with regard to the ultimate reality of Time (3), Elias seems to arrive at a similar conclusion as Kant but from the opposite direction. Elias firmly locates Time as *internal* and *dependent* upon human consciousness, inasmuch as Time springs from linguistic representations of timing activities (Elias 2007a:99). Under the pre-ordained value system that usually attends sub-question (3)—namely that to be 'real' something must be independent of human consciousness and external to it—we can conclude that Elias argues for the unreality of Time. This is further supported by his reference to the 'social reality' of the time unit of a year as 'related to, but distant from, a natural reality' and to 'time' as a symbol for 'tangible' changes (Elias 2007a:46, 85). However, to my knowledge, Elias does not weigh in on the question of Time's reality, so any conclusion must remain most preliminary until further investigation.[29]

Regardless, the distinctions between Elias' and Kant's approaches to Time should be apparent—although once again I do not intend the above comments to be decisive on the issue of their (ir)reconcilability. This question requires much greater engagement with and comparison between both theorists than I undertake in this project, and would seem to revolve around further elaboration of the idea of 'change continua' and how individual changes are apprehended as a continuum. The key challenge may be to understand fully Elias' view on the conditions of possibility of grasping changes as a continuum, especially whether he indicates that we can connect changes without reference to *another* continuum. If we can,

[29] Although he is elsewhere preoccupied with how societies develop 'reality-congruent' knowledge (Elias 2009:27, 54; Mennell 2012; see Dunning and Hughes 2013), which certainly leaves open the possibility of a free-standing 'time' of the natural world. None of this means that the philosophical aspects of thinking about Time simply disappear; rather, the relevance for IR of a philosophical answer to the multivalent question 'what is time?' requires substantive justification by philosophy advocates. Elias' (2007a:32–34, 50–53, 100–01, 1989c:340–41) various comments on Kant and other philosophers leave little doubt that he believes the proper point of departure for thinking about Time to be sociohistorical investigations of timing activities rather than transcendental elaborations of metaphysical possibilities.

then ‘change continua’ can be said to precede timing and ‘time’, and their temporal quality advocates for Kant. This might open a Kantian back door through which elements of a pre-existing temporality enter into Elias, although most of the gaps introduced above—and especially the difference between learned knowledge and a priori intuitions—would still require closing and Kantian proponents would still need to avoid ‘fasten[ing] on any particular type of relationship [such as timing] as the universal characteristic of human experience’ when the only universal characteristic is the most general ‘*making of connections as such*’ (Elias 1989c:31 emphasis added). If, however, we cannot grasp some array of changes as a continuum without the aid of another continuum, then it seems that the act of connecting changes into a continuum and the act of timing are recursive, interrelated, and overlapping processes. Furthermore, this would seem to tip the scales toward Elias in that what is necessary for apprehension is not some extant intuition of Time but the *relation* of the changes in question to the other continuum. A further Eliasian point would be that it only becomes possible to philosophise about Time in the way that Kant does after centuries of timing activities and articulations of those activities. This would present challenges on the Kantian side of things inasmuch as it suggests that Elias’ sociohistorical argument (1) might supplant Kant’s transcendental one (2) by showing that the condition of possibility of thinking through the conditions of possibility of a sense of Time is the multi-generational and multi-century effort to develop a sense of Time.

Conceptual objections

Alternatively, instead of insisting that time predates our representations of it skeptics might argue that collecting so many diverse activities under the idea of ‘timing’ as I do leaves the role and meaning of ‘time’ murkier, not clearer. Why treat all acts of integration and coordination as potential timing examples? For instance, ‘telling time’ with a wristwatch and playing a game of tennis both involve integration and coordination, but can they both count as timing activities? I believe they can inasmuch as each makes possible references to ‘time’. Reading my wristwatch is easy—there are only twelve primary divisions indicated at any given moment by only two ‘hands’. By noting where the hands point, I ‘tell’ the ‘time’ as, e.g., 12:24 in the afternoon and coordinate my actions accordingly, perhaps by declaring that it is ‘time for lunch’. Although playing tennis involves integrating and coordinating with an opponent—we have to be co-extensive, obey the rules of the game, and adjust our actions to each other—it is not nearly as repetitive and reliable as my wristwatch. A tennis match is simply too idiosyncratic, it would seem, to produce a substantive vision of ‘time’, in which

case it would be better not to group this together with the more familiar idea of Western Standard 'time'.

However, it is possible to talk about 'time' based on the activity of playing tennis.[30] For example, I report that 'time passed too quickly' to summarise a match in which I felt overwhelmed. This indicates that I could neither coordinate my own actions at a pace necessary to match my opponent's shots nor anticipate what he was going to do, with the result being that I was at a loss for how to best proceed and always felt I was trying to 'catch up' to his play and to the points, games, and sets he was accumulating. Conversely, if I were highly successful at coordinating my shots against his I might report that 'time slowed down'.[31] This indicates that my timing was so effective that I was relatively untaxed by the contest—things happened just as I anticipated, allowing me to focus more intently on things which, were the contest not going so well, I might never notice (e.g. the stitching on the ball, the sound of rubber shoe soles on asphalt, the feel of the padded handle grip under my palm).

Furthermore, those who hold that the mechanical clock and unirectilinear temporality exhaust timing and 'time' must provide an account of why we are not able then to time our lives completely—that is, to integrate and coordinate ourselves with all the pertinent change continua so that nothing bad happens and we are always able to act successfully. If clock timing is the decisive and exhaustive example of timing then we should be able *to time* any and all change continua by it, yet we frequently have unexpected, unpredictable, and otherwise pitiable experiences with which we cannot easily reckon. As mentioned, a clock can only help us to time in one particular way. Likewise, the 'time' it 'tells' does not exhaust substantivised references to timing activities. Because we want for *comprehensive* coordination, we still fall prey to 'bad timing', 'fate', circumstances, and the problem of Time. If the 'objective time' reckoned so expertly by the clock is all the 'time' that is possible or necessary, then these vagaries traditionally associated with Time should not persist.

Possessing a watch does not *automatically* allow us to coordinate others' behaviours or to anticipate the outcome of sporting events, when the next international terrorist attack will occur, or any change not sharing the clock's metered and numeric properties in common. And it is not just the lack of clock-like properties that make these phenomena difficult to predict or coordinate—rather, such events do not readily submit to *timing of any sort* because there is not enough information, too much complexity, or deliberate subterfuge. Human col-

[30] For an incredibly detailed, if fanciful, exposition of the similarities between the dynamics of tennis and the nuclear exchanges signified by the Doomsday Clock, see (Wallace 1996:322–29).

[31] Of the former example, I have much experience; of the latter, I am mostly speculating.

lectives before the emergence of standardised time reckoning failed to anticipate the attack of a more violent clan not because they lacked wristwatches but because they were unaware the clan existed, were preoccupied with other things, or the violent clan actively prevented any sign of their impending assault—a 'sneak attack' is unanticipated not because of our inability to locate it on the calendar or clock but because the attacker is sneaky. More recently, the attacks now known by their calendrical date, 9/11, were unpredictable by calendrical and clock reckonings but also by reference to business cycles, balances of power, or most other change continua pertinent to international politics. This is not to say that somehow the standardised clock or Gregorian calendar should have predicted the attacks but that, like the others listed, these change continua could not integrate and coordinate the international political phenomena necessary to anticipate, dissuade, pre-empt, or otherwise avoid the attacks. And thus it was possible to refer to the attacks as a 'rupture' or 'break' in Time or to use Shakespeare's (2008:1.5) famous phrase, 'time is out of joint', to describe their aftermath (Löwenheim 2009:175–76; see also Al-Azm 2004; Bergoffen 2008:74; Wuthnow 2010:73; Ellenson 2011; Franklin 2011; Gray 2011:79; Melnick 2011:18; Leiss 2013).[32] On the other hand, I can anticipate someone's behaviour and coordinate my actions with theirs accordingly if I know them personally or study them in depth, and I can accomplish all this without clock-based reckoning. And when I correctly anticipate their behaviour and act accordingly, someone may well complement me by saying 'nice timing!'

Theoretical objections

Alternatively, sceptics might argue that I have rendered timing *too* generally. As Kenneth Waltz (1959) noted about human nature theories of international conflict, an idea that explains everything actually explains nothing, since we are interested in understanding why phenomena occur or not, and how they occur in one way and not another. This argument runs up against the empirical dilemma of prolific and variegated references to timing and time. People possess a bad, good, or perfect 'sense of timing'. Time is an agent or force that flies, slows down, accelerates, and passes us by; it is a problem that ensures decay, does us in, and devours everything; it is a river or a commodity; it is also something more abstract and shaped—curvilinear, unirectilinear, a layered manifold, extensive or punctual. This cursory catalogue indicates the profusion of 'time' utterances, which leaves students of time with two choices. Either we can assume that people consistently misuse the word 'time', or we can

[32] Derrida (1994:96, see also 26) describes it most succinctly: 'The time is out of joint. The world is going badly.'

take them *at their word* and treat the multitudinous and multifarious utterances of 'time' as empirical indicators that timing is under way.

Given the ubiquity of 'time', this recommends a most general theoretical framework. The wager implicit in expanding Elias beyond the usual, clock-based or calendrical suspects of time studies is that a more capacious understanding of timing can help us identify and engage the roots of the many invocations of 'time', from explicit theorisations to quotidian comments, from domesticated dimensions to malevolent figures. At the very least, until sceptics can provide an equally compelling wager about how to theorise the multitude of 'time' utterances that avoids philosophical aporia and an unreflective generalisation of historically specific value scales, the approach developed here stands on level footing. To be clear, I am not claiming that *every* effort to integrate and coordinate two or more change continua is *necessarily* an instance of timing, nor am I contending that they are all the *same form of timing*. Rather, I think we should remain open to the possibility that many more of these efforts instantiate *various forms of timing* than traditional time studies would lead us to believe, and to the idea that we can distinguish them based on the types of continua that they propose as timing standards. Just because Eliasian timing involves the coordination of multiple change continua does not entail that every instance where multiple change continua are coordinated is a case of timing; yet just because every such instance need not be a case of timing does not entail that the concept of timing applies only to the usual suspects.[33] Because this kind of approach to Time is incipient, it makes sense to pursue any such activities of coordination that also come with or make possible 'time' utterances. These activities will not all be the same form of timing any more than they will produce identical visions of 'time', which is precisely why they can help us better theorise the empirical pervasion of 'time' utterances.

From timing to the problem of Time

In addition to defending my extension of Elias, it remains to show how the problem of Time arises from timing activities. I understand the problem of Time as a particular example of Elias' general claim that 'time' emerges as a conceptual object as timing activities become more and more prevalent. Just as the neutral vision of Western Standard 'time' rests on the peculiar features of a repetitive and widely successful timing practice, the key to the problem of Time can be found in *challenges* to active timing. 'Time' acquires malevolent and agentic

[33] This is implied in Elias' (2007a:85 emphasis added) inclusion of 'very different sequences' in various 'time' references.

predicates as the stakes, challenges, and vagaries of timing grow. In short, the problem of Time originates in problems *with* timing.

Elias' distinction between passive and active timing is useful for this derivation. Recall that active timing is self-conscious, reflective, and effortful while passive timing requires little reflection or effort because the change continua are readily coordinated, either due to the success and institutionalisation of earlier active timing efforts or because they are naturally more amenable to coordination. Active timing indicates that significant effort is required to relate some change continua to each other (see Elias 2007a:40). Furthermore, these continua and the relationships that may be established between them are often complex and extensive. Since we produce 'time' utterances by generalising about relational features of timing,[34] 'problems of active timing' (Elias 2007a:109, 43) are symbolically generalised as the problem of Time. In other words, when timing is hard, we attribute the difficulties and their effects to Time itself.

This brings together the problem of Time and Western Standard 'time' as two subsets of the more general phenomenon of Time. Both traditions of 'time' utterances evince the psycho-linguistic tendency to refer to 'sociocentric' activities using substantive and *impersonal* nouns understood as exogenous to human beings and their activities (Elias 2007a:62). And inasmuch as my expansion of Elias is convincing, both arise from more or less successful efforts to time. With regard to the problematic predicates of Time, the psychological phenomenon of externalisation introduced earlier is especially helpful. In cases of internal conflict, which we desire to resolve for the sake of autobiographic continuity, cognitive resonance, or existential intelligibility, it is easier to attribute internal-relational challenges to some external, substantive scapegoat. For examples, 'angry feelings and aggressive impulses may lead young children to be afraid of monsters in the dark, the savage *[sic]* to believe the jungle is populated by evil spirits, or the paranoiac to see persecutors everywhere' (Moore and Fine 1990:70). Or in our case, problems with sociocentric timing engender fear and anxiety, which manifest and embed in language as problematic attributes of an external figure or force named 'time'.[35]

[34] Generalising about their extant *substantive* properties might prevent hypostasis, but since timing refers to how relationships are established between almost any change continua, it would be more difficult to subsume the multiple *whats* being related than to symbolise *how* this is done.

[35] This might mark a more specific case of *defensive* externalisation, see (Moore and Fine 1990:70). The problem of Time shares much with Inayatullah and Blaney's (2004:49) 'problem of difference', 'something humans feel compelled to explain and locate at some distance from the self so that it might be contained or vanquished'.

Much as there is no life without some difference, human existence depends on an activity—timing—that requires no small effort and is fraught with difficulties. The key challenge is that timing necessitates a continual encounter with potentially discordant change, which can at any moment call for a return to active effort where passive timing previously has been sufficient, or an altogether different timing project. Time's menacing mien emerged in language when active timing efforts were particularly challenging. And once embedded as a symbolic resource, it may 'return' whenever timing is problematic. In this sense, the problem of Time is an example of Elias' learned fund of knowledge, for it communicates figurative lessons about timing challenges from one generation to the next.

The problem of Time may return whenever extant timing 'breaks down'—whenever discordant change undercuts a passive or active timing project—or a new timing endeavour begins. The historical record of lamentations about the problem of Time introduced earlier in this project is thus a symbolic record of the vagaries of timing—it matters, it is hard, and the outcomes are uncertain. Through externalisation, we cope with these facts by constructing a 'problem of Time' located at a distance from ourselves in hopes that we might then be able to manage, mitigate, and/or tame it. Note that this psycho-linguistic peculiarity produces a paradoxical structure to the relationship between timing, language, and the problem of Time: *when timing is difficult, we speak of 'time' as a problem that must solved in order for timing to succeed*.

Making sense of 'time' utterances

Tracing the process by which timing activities produce 'time' utterances provides much more clarity to the place and role of the problem of Time. It is possible to sketch a spectrum of references to 'time' and their links to features of timing, as represented in figure 3 (see p. 53). When timing requires complex decisions, great effort, constant vigilance, or is threatened with failure, 'time' takes on more concrete, discordant, and threatening predicates. That is, the problem of Time indicates problems with active timing. Once active timing succeeds and persists enough to become a largely passive and institutionalised activity, 'time' takes on more abstract, homogeneous or unified, and generally less threatening predicates that signal a move from effortful to latent activity. Abstract, unified, and non-threatening visions of 'time' indicate successful and primarily passive timing.[36]

[36] By virtue of its reliability and graphic simplicity, the clock provides a timing standard that requires little effort to learn and routinise. Western Standard timing is passive timing at its best, and so we imagine the 'time' reckoned by the clock as a homogeneous, divisible, singular, and neutral dimension or flow.

However, because there exists a multitude of timing activities as well as near limitless potential for new timing projects, some of which only become possible on the shoulders of previous timing, the problem of Time persists as potential even while successful timing embeds abstract and untroubling visions of 'time' in language. Although we tend to view the problem of Time as an external force opposing timing projects, it proliferates *along with* successful timing activities. For example, thermonuclear technologies were impossible without substantial timing mechanisms but also necessitated the Doomsday Clock. The problem of Time obtains wherever active timing difficulties persist, and it may 'return' at any point when timing falters—either because discordant change destabilises passive timing or because a new timing project is undertaken. There are thus three areas of particular interest about this spectrum, indicated by the overlapping circles:

1) Active timing confronts failure because it is nascent or because discordant changes have destabilised extant timing efforts, and the problem of Time emerges;

2) There is some threshold 'above' which active timing succeeds enough to become passive or 'below' which passive timing becomes active because effort and decision are suddenly required, and the Problem of Time may return;

3) Passive timing obtains and embeds, and a neutral, homogeneous 'time' settles in.

If I have it right, then references to the problem of Time signal one of the first two points. When passive timing turns active, we might say that 'time' has snuck up on us, that it flies by, or that it has 'returned' (as when the 'return of history' signals a shift toward instability). And when active timing faces failure, such references should be particularly pitched, as when a time god devours humanity or the river of time overspills its banks and bears us rapidly toward 'chaos' or some other unwelcome outcome. Either way, evocations of the problem of Time suggest that the timing efforts to which they refer are either becoming or continuing to be active, effortful, fraught, and perhaps inadequate.

This spectrum helps explain why the problem of Time predominated in the early history of civilisation, as well as why it has been joined in recent centuries by an abstract vision of time in the modern age of standardised time reckoning. In early days, timing was active and difficult, and ancient cosmologies featured malevolent Time gods who visited decay, dissolution, and death upon humanity. The rise of modern Western Europe included the development of a reliable mechanised clock, which was the culmination of centuries of timing

efforts based on standards derived from natural and mostly repetitive change continua. As these efforts became more and more successful and ultimately passive, a neutral, domesticated vision of Western Standard 'time' emerged in social consciousness. Additionally, this spectrum explains why the problem of Time recedes but never disappears entirely. As long as the broad panoply of timing activities face difficulties and require effort and hard choices, the problem of Time persists—not so much as a parallel tradition as a dormant partner to every sociocentric act of timing.

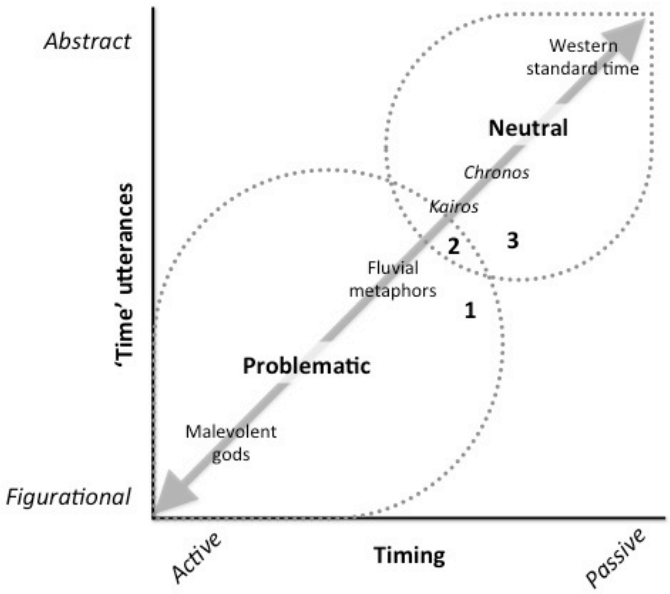

Figure 3: Timing and 'times'

Sourcing the Problem of Time

Since the problem of Time is an externalised entity, it makes sense to explicate the internal features of timing that contribute to the challenges that it symbolises. In particular, three sociocentric sources of discordance can throw timing off: *finitude, novelty,* and *complexity*. Finitude connects the problem of Time with much of the literature on time studies, where references to humans' 'time-bound' or 'temporal' existence points to our condition as finite beings. From ancient cosmologies to modern existentialism, in which the awareness of inescapable mortality 'looms as the inevitable closure whose relation to my ongoing projects is

forever problematic' (Carr 1986:81; see also Heidegger 1996; Hoy 2009:147–52), time and finitude have a long history together (see Brandon 1965). Mortality highlights the traditional distinction between the human realm—in which everything passes—and the eternal realm—in which everything lasts. We say that Time's passage guarantees finitude because it propels us ever closer to certain death and we have substantial theoretical systems built around this link that attest to its resonance (e.g. Heidegger 1992, 1996). Elias (2007a:106) concurs on the centrality of mortality: 'The personal reason why the discovery of that which is eternal and permanent behind all changes has a high value for people is, I suggest, their fear of their own transience—the fear of death.'[37] This time-finitude connection acknowledges that none of us human continua of change can outlast *all* the change continua that we encounter and desire to integrate and coordinate with ourselves, so we say that 'time outlasts us' and brings our own passing ever closer.

However, finitude also identifies a more prevalent and central challenge of timing. Although we usually identify it with mortality, finitude also indicates a more *ordinary* defect of imperfection and incompleteness (MacKenzie 1916:401). Mortality, or *ultimate finitude*, looms at the end of mortal life, but everyday imperfection, or *ordinary finitude*, pertains to its entirety. Discussions of time and finitude tend to elide this point,[38] in spite of its central role in ancient narratives about humanity's estrangement from the divine. For instance, the Judeo-Christian story of original sin delivered humanity to a lifetime of struggle and strife before it brought mortal death (Pagels 1988:140). Mortality epitomises but does not exhaust human finitude, which is also indicated by bounded knowledge, bridled action, and the unforeseen consequences that characterise human affairs. In politics in particular, ordinary finitude may pose the more salient challenge, inasmuch as collective and national identities provide individuals with a sense of belonging to an entity that will outlast them (see Niebuhr 2001) but that entity must be reproduced, stabilised, and otherwise shored up on a daily basis from novel and discordant events.

Ordinary finitude delimits active timing. The ubiquity of change in human experience means that any finite timing activity is fragile because we simply cannot accommodate too many or too recalcitrant continua. If we have to grapple with these, comprehension adequate

[37] Elsewhere: 'What are people not willing to believe in order to conceal or sweeten the idea of the finitude of their lives, the thought of their deaths!' (Elias 2007a:107)

[38] Although he often characterises finitude in the ultimate, mortal sense, Heidegger (1996, 1997:§5 [85–86], §11 [149–50], 1995:§2 [6–9], §20 [121–22], §39 [252–53]) takes some account of its ordinary aspects by referring to 'being thrown into and onto beings' or to 'intuition's allowing something already extant to encounter me in intuiting', which have been interpreted as distinguishing between ourselves and 'a world that we did not create and *do not fully understand*' (Inwood 1999:70).

to past relations of coordination cannot proceed with certainty due to the finite character of our knowledge, and this throws the future into doubt. Because coordinating various continua of change is an existential necessity, and we know that each life is itself a finite continuum of change, timing recalls our immediate limits and eventual death. At this point, we may externalise our ordinary (and ultimate) finitude as the figure of Time bringing certain mortality and uncertainty about all else.[39] U.S. Secretary of Defense Donald Rumsfeld's (2002) notorious rumination on 'known unknowns and unknown unknowns' is illustrative here: we speak of time as 'bringing' the known unknown of death ever closer, and unknown unknowns all along the way.

Novel change complements ordinary finitude. Novelty indicates the emergence of something new in relation to a pre-existing understanding of the world (Baert 1992:81).[40] In Eliasian terms, we can think of novelty as *discontinuous* change in a hitherto continuous sequence or series, which threatens the relational basis of timing—the 'properties in common' that a series shares with other continua (Elias 2007a:60, 109). When commonality is rendered uncertain, effective timing comes into question since integration and coordination depend upon this, and we then hear references to '"*times* when the expected is flouted, or when things somehow go awry"' (Mattingly, Lawlor, and Jacobs-Huey 2002:745; see Wibben 2011:1).

Furthermore, novelty in varying degrees and qualities is intrinsic to every change continuum, since change is the emergence of difference.[41] Thus, every timing activity includes the potential for ruination by fragmentation, disorientation, and discord, or what we might imagine in spatial terms as 'slippage' in the previously secure links by which change continua 'mapped' onto each other. That is, by its intrinsic relationship to novel change, every timing act—both passive and active—contains within it the seeds of its own demise.

Novel change requires at least a return to active modes of timing for the purposes of adaptation and innovation in order to ensure continued or renewed coordination of the change continua in question. Novel change also threatens the adequacy of active timing. If novel change approaches the limit of absolutely unprecedented—or *sheer novelty*—

[39] It may be that death continues to receive a more concrete figuration as the Grim Reaper or Father Time because mortality is an accepted fact, while imperfection at any given moment seems as if it should be resolvable. So we call singular instances of ordinary finitude 'bad timing' to signal that we *could* have done something different, and refer to biological *necessities* (and the overwhelming aggregate of imperfect instances) as 'the ravages of time.'

[40] Although this discussion owes much to Baert, I cannot undertake an exposition of his temporalized sociology here. For an introduction, still too brief, see (Hom and Steele 2010:274–79).

[41] In hypostatised terms, 'every present contains "the novel" (that is, "the emergent"), which is not only not predicted but actually unpredictable' (Mead, quoted in Baert 1992:9; see Hom and Steele 2010:279).

adaptation becomes by definition insufficient. Additionally, the necessary innovations (if they exist) remain unimaginable, since an occurrence literally without precedent has no connections to anything known and is therefore impossible to comprehend using an extant stock of knowledge (see Suganami 1999:372).[42] Something this cognitively unsettling engenders significant anxiety as well, for '[a]ll that is known, is known by its name. The nameless occurrence is frightening' (Elias 1989c:370; Giddens 1990:133). Our intellectual, practical, and existential reconnoitering after a novel occurrence is precisely an attempt to restore the adequacy of timing. The problem of Time summarises this tension in symbolic form, with its most malevolent figurations giving a name to the otherwise 'nameless' occurrences that constitute the upper limit of novelty and threaten to vitiate knowledge, understanding, and timing altogether.

When active timing succeeds, we temporarily transcend ordinary finitude and by association the problem of Time as our anxiety and fear diminish. As active timing is routinised, embedded, and becomes passive timing the problem of Time may recede enough that the timing project in question comes to symbolise the transcendence of both ordinary and ultimate finitude—it surpasses our ordinary limitations, and by virtue of its success, seems to have the potential to outlast us. To the extent that they are more successful, generally applicable timing standards lend us a greater sense of continuity and stability along with reifying a homogeneous and neutral vision of 'time'. Successful active timing transcends ordinary finitude; successful passive timing may symbolically transcend ultimate finitude as well by establishing a sense of durable order, natural stability, and even invincibility.

Finally, because it tries to integrate and coordinate two or more change continua, timing must grapple with the problem of complexity, which we can understand as *too much* change or changes inextricably interwoven with each other. Timing relies in part on the timer's ability to isolate change continua and render them amenable to timing, and complexity opposes these operations. Since every change calls into question the 'properties in common' that timing either establishes or relies upon, the higher the quantity of changes which must be coordinated the more effort is required. Or, change continua inextricably bound up with other

[42] Suganami's (1999:372 emphasis added) actual point is that 'the act of "explaining" assumes a *common set of prior "understandings"* between the explainer and the explainee. *It would be impossible to explain anything to someone who understood nothing*'. However, the basic idea is one of cognitive limits: if we cannot connect something to our extant understanding *at all*, we simply will not be able to understand it. Skeptics might point out that novel change is also necessary to meaning-making, for how can we *make* meaning without something new and different occurring? But no knowledge is *purely* new since we cannot construct knowledge *ex nihilo*. Instead, we build on pre-existing resources like symbolic language (Boyd 2009:134). Experiences that burst the bonds or bounds of language thus also threaten knowledge itself (Elias 1989c:370, cf. 378; Edkins 2003).

continua are harder to isolate for integration and coordination. For example, policy planners might want to coordinate future choices with the economic cycle of South America but if it is bound up with political dynamics their task is much harder. When relevant changes occur in great quantity or when they are bound up with other change continua the timing project becomes increasingly complex, and we begin to describe the situation as 'chaotic' or to say that 'time' is 'accelerating' from a flow to a 'torrent'. Yet what is happening is that the timing activity requires more effort and decisions than we were prepared for and dealing with this keeps us from noticing all the other changes we normally would.

The unsurpassable fluvial metaphor

This last point deserves further elaboration. When integration and coordination fail, when change continua 'slip' out of synchronisation, we often refer to the 'fluidity' of the situation or describe events as in a state of 'flux'. Yet we also easily describe time as constantly 'flowing' or 'passing'. The first pair of fluvial metaphors indicate the problem of Time, while the second pair usually indicates a homogenous and non-threatening, abstract notion of time. This is somewhat odd, and might seem to lend support to the earlier objection that I am grouping disparate instances under an overly capacious umbrella of timing and the problem of Time. How can it be that time is always 'flowing', yet situations are difficult because they are 'fluid' or 'in flux'?

Rather than two disparate or contradictory categories of fluvial metaphors, fluid/flux and flowing/passing simply mark two different points on the spectrum of symbolic, externalised references to timing. Flowing/passing indicates that a timing activity is ongoing—that two or more change continua *continue* to be integrated and coordinated successfully, and perhaps even passively. But since a given timing activity is embedded in a vast milieu of other timing activities and countless change continua, any of which may impinge on it as novel or complex change, flowing/passing can easily take on a problematic quality. For example, we say 'everything was fine for awhile, but as time passed things got complicated.' Time itself did not pass since 'time' is an utterance rather than a thing, substance, or force. Rather, *a variety* of timing activities and pertinent change continua intermingled in a way that rendered a given timing project problematic. Because we are internal to *this* timing activity, we externalise the challenge to it as a substantive and wider 'flux of time' that 'brings' change to us. Conditions were fluid and in flux before this, just unproblematically so, and thus we were relatively at ease in the 'flow of Time' (see Elias 2007a:60). Once our timing faltered, we viewed the situation as increasingly fraught, and fluid/flux may replace flowing/passing in

our symbolic representation. *'Time' flows or passes as long as timing activities continue*, but when those activities collide with or problematise each other the flow of 'time' becomes *too fluid* and threatens chaos. The tidy 'flow' of time symbolises successful timing; the problematic 'flux' of time symbolises timing troubles, but the flow or passage of Time is precisely how flux of chaos 'arrives'. This shift in language suggests that timing has faltered due to ordinary finitude, novelty, and/or complexity.

***

Having developed an intentionally expansive framework for understanding the relationship between timing and 'time' and defended my moves at some length, before moving back in the direction of IR theory I would like to draw out four aspects of the foregoing discussion that will be of general relevance through the rest of the project and particularly important for the argument that unfolds over the remainder of Part I. Building from the social theory of Elias, our discussion has so far worked through the following claims:

1) *Timing* is any activity that,
    a. Works to *integrate* and *coordinate* multiple change continua using one continuum as a standard of reference; and,
    b. Creates and presents a particular temporal vision and/or 'time' utterances;
2) When effective timing renders the object change continua more intelligible and less problematic it may become embedded and passive, while our symbolic representations of this activity take on more neutral and malleable qualities; but when timing struggles or fails, our symbolic representations treat the problematic features of those change continua as *effects* of the *flow* or *passage of Time*
3) Timing is *Janus-faced* in that insofar as (1.a.) and (1.b.) are effective, they not only produce an intelligible vision of 'time', they also helps us *to time* the world outside ourselves—that is, to integrate and coordinate certain aspects of the wider, ever-changing world (which includes or own actions) for some purpose;
4) Language is not only the medium through which we symbolically represent timing, it is also a change continuum in its own right that is capable of providing a frame of reference by which we orient and coordinate ourselves with the wider world; this suggests that linguistic artefacts such as theories and narratives might be understood as instances of timing.

These points summarise the conception and the criteria of timing laid out above, and indicate how the various references to 'time' in ordinary language emanate from a general, directed human activity. As we will see in the rest of this chapter and the next, they also provide an appropriate platform for engaging the specific concerns of IR theory.

A Time for IR

So far, the discussion of timing has remained focused on how timing produces 'time' utterances, especially the problem of Time. I still need to show that this link is relevant to international politics and IR. What advantage do we gain over the usual approaches to 'time' discussed at the beginning of this chapter by adopting Elias' approach? I contend that we gain a better ground for analysing IR and its relation to Time in several respects.

First, Eliasian timing subsumes predominant approaches to time in science and philosophy. Elias (2007a:86) shows how the idea of 'physical time' developed out of social timing projects. Progress in the natural and especially the physical sciences depended on the social production of consistent and generalisable time-reckoning that, in the course of its successful development, came to be treated as a natural, abstract, and universal object or dimension rather than a reliable means of coordinating change continua (Elias 2007a:87–88). Then it was reified by linguistic habits, which 'constantly reinforce the myth of time as something which in some sense exists and as such can be determined or measured even if it cannot be perceived by the senses' (Elias 2007a:36). In a stroke, this seems to dissolve the philosophical aporia found in so many of the theoretical efforts to understand time discussed earlier.[43] If we are convinced by Elias' argument that physical/objective vision of 'time' merely marks the reification of one sort of highly successful and resilient timing effort, then there is no need to connect physical/objective to phenomenological/subjective 'time' in a way that preserves the parochial preeminence of the former just because it evokes the comfort of eternity. In fact, this value scale represents 'almost perverse distortion of the actual sequence of events'(Elias

[43] To my knowledge, Elias does not discuss Ricoeur's critique of the philosophical aporia of Time, yet his thinking provides a crucial back-story to this aporia that relieves the tension by demonstrating how it originated in the trade-off between humans' linguistic-symbolic capacities for trans-generational learning and their tendency to forget whence that learning came. Instead of trying to bridge a fundamental gap between subjective and objective, or human and cosmic, time, theorists might instead inquire as to *how* and *why* the heavens came to be appraised as the ultimate exemplar of 'real' or 'natural' Time (Elias 2007a:103).

2007a:96). Likewise, there is no temptation to build 'up' to objective 'time' from subjective experience, as many phenomenologists struggle to do.[44]

By emphasising timing and the problem of Time, my framework also helps to contextualise the time studies that suffer from incoherence and inconsistency. Whereas beginning with timing facilitates a more complete and coherent account of how 'time' comes to our attention, many accounts begin somewhere in the middle after timing has gone on long enough to produce a congealed 'concept of time'. Ignorant of its practical origins, they approach each particular 'time' as given, as merely one amongst a multitude of incommensurable layers in the indecipherable manifold of human time (see Fasolt 2004:26). This in turn encourages the illusion that 'concepts of time' either float freely in the world or attend geographic, historical, or cultural reductions beyond which no explanation is necessary or possible. By contrast, beginning with timing demonstrates that 'concepts of time' identify specific features of timing activities rather than given, incommensurable phenomena. For instance, and as already intimated, it is because pertinent timing efforts must accommodate quickening rates of change within their object continua that we begin to sense and say that Time itself is 'accelerating'.

Additionally, treating 'concepts of time' as subsidiaries of timing renders those utterances more internally coherent. Humans confront timing challenges in any era characterised by growing interconnections, complexity, and novelty, and interpretations and metaphors are symbolic proposals for how some things may be timed. They help integrate and coordinate discordant change within a story that follows a thematic, orderly 'trajectory'. Linear and cyclical 'times' are two primary, powerful, and non-mutually exclusive examples of this. Rather than Time as such or incommensurable 'concepts of time', they are examples of our timing paradox: they propose how to placate, confront, or even tame the problem of Time so as to enable successful timing. In the process of resolving these persistent misunderstandings, however, a timing-Time framework also asks for much more than most time studies have provided, so far. For if timing is the root of 'time', then a fuller explication of the various 'times' at work in international politics and other social realms requires that scholars connect those utterances to specific timing activities and wills to time. In what timing projects are the nation-state, hegemonic non-state actors in the international system, and other power structures involved, and to what ends? And in the case of critical scholars, what timing goals and

[44] Eliasian timing also speaks to the debate about A- and B-theories of time. In terms of timing, neither of these series can decisively trump the other, although 'earlier than' and 'later than' are relations *embedded* in the successive nature of experience, while the ideas of 'past', 'present', and 'future' can only be applied to experience 'by virtue of an anthropomorphic identification—that is, figuratively, as when one speaks of the future of the sun' (Elias 2007a:66, also 1989a:199, 1989b:519).

activities are they proposing as alternatives? If every 'time' represents a timing activity and a will to time, then any refusal of dominant temporal modes that goes beyond a facile denial—any effort that does more than merely withhold—must indicate *which* program of integration and coordination and *whose* will provides the alternatives to the political status quo. Emphasising timing thus not only provides the back-story behind various 'time' utterances, it also suggests the way forward for a more reflective critical engagement with Time.

However, the most significant time-studies benefit of extended Eliasian timing is to sketch a general and systematic framework for analysing 'time' utterances without imputing any 'oneness' to Time itself. It thus avoids the problems of philosophical aporia introduced by Ricoeur, metaphysical assumptions introduced by Walker, and politicised unification introduced by Hutchings. Understood in Eliasian terms, Time is *no unity*. Rather, Time is a *totality* comprised of the *profusion of 'times', their root timing activities, and the change continua that go into these*. 'Time' is no more and no less than a linguistic family constituted and delimited exclusively by humans' capacity to time and to discuss it.[45]

In addition to avoiding the pitfalls that animate Walker and Hutchings, a timing-Time framework adds to their valuable efforts. Unpacking the origins and benefits of linear and cyclical metaphors complements Walker's concern to undercut the received wisdom of IR's predominant temporalities. Linear-inside and cyclical-outside are historical assessments and narrative schematisations of political processes reified as conceptual constraints on IR theory. It may well be that linear-progressive and cyclical-violent are useful for distinguishing between *some* aspects or eras of domestic and international politics, but Walker's analysis exposes the pitfalls of conflating these metaphors with freestanding, sufficient international ontologies or parameters of political possibility. By demonstrating the incoherence and mutual non-exclusivity of linearity/cyclicality and explicating their bases in timing activities and the will to time, I have tried to lend support to Walker's overall argument.

My framework speaks to Hutchings' use of *C/K* in four ways. First, as discussed above, a focus on timing suggests that *chronotic* predicates such as 'homogeneous', 'continuous', and 'unirectilinear' are symbolic representations of passive timing that serves some group and purpose. Second, this helps clarify and deepen the relationship between *chronos* and *kairos*. The latter represents a juncture or intersection in passive timing where the tension between coordination and change is particularly susceptible to contestation. If *chronos* marks

[45] By defining Time this way, I am building from Suganami's (1999:379) argument that the 'whole social world' (except its material aspects) can be understood as a 'gigantic river of innumerable stories about itself and its components'.

passive timing at its best, *kairos* marks the creative origin of active timing. Third, timing exposes the interventionary inclination of theory as a doubly active sort of timing. The theorist describes how to better integrate some change continua, but when she writes 'with great urgency' at a 'critical moment' or 'turning point' that makes her theory 'timely' she also times her own effort to current events.[46] Fourth, my framework provides an empirical buttress for Hutchings' ethico-political alternative to the hegemony of 'unified world political time.' She advocates heterotemporality, which a timing-Time framework suggests is manifest in *all* the various 'time' utterances that placate the seemingly natural discord of Time itself and thereby symbolise and facilitate timing. Recall that the implication of focusing on timing and 'time' utterances is that there is no ontological *unity* to 'time', there is only a practical *totality-in-multiplicity* of utterances and the activities they represent. *Because it consists only of 'times', Time is already heterotemporal.* A timing-Time framework thus treats heterotemporality as the baseline and recasts 'hegemonic' and unified political variants as deviations from this norm.[47] No longer ontological bedrocks, Western Standard or physical 'time' are instead competitors that emerged from heterotemporality, even if their viability depends in part on suppressing this heritage.

In addition to these benefits specific to time studies, the wider objective of this project is to show that a timing-Time approach can say something meaningful about the relationship between IR theory and its phenomena of interest and perhaps redirect discussions about how to 'do' IR. My timing-Time account is unimaginable without the ideas of coordination and discord and thus comports well with the empirical record of international politics and the intellectual history of IR. For two particularly apt examples, Kenneth Waltz's neorealism rests on an analysis of 'relations of coordination' (Waltz 1979:81), while Robert Keohane's neoliberal institutionalism emphasises the political processes by which states overcome 'discord' through 'cooperation' when no spontaneous 'harmony' exists (Keohane 2005:x, 5).[48] Additionally, international political phenomena frequently evince change, complexity, and

[46] In this sense, theorists are not so different from political practitioners, who frequently invoke the 'urgent' need for 'decisive action'.

[47] For some preliminary empirical evidence of this, see (Hom 2012).

[48] Keohane's theory can even be understood as a description of state timing through foreign policy. Harmony describes a situation in which actor's policies 'automatically facilitate the attainment of others' goals', so 'no adjustments need to take place'; discord describes a 'situation in which governments regard each others' policies as hindering the attainment of their goals, and hold each other responsible for these constraints'; and cooperation occurs 'when actors adjust their behavior to the actual or *anticipated* preferences of others, through a process of policy *coordination*' (Keohane 2005:51 emphasis added). These are particular examples of spontaneous integration and coordination, in which no timing is necessary; discordance; and effortful and intentional timing, respectively. In particular, Keohane's definition of coordination emphasises the 'when aspects' of multiple change continua in the form of state policies.

novelty—all of which suggest that the problem of Time is pertinent as well. Yet the very field tasked with studying these phenomena is quite often guilty of treating change, disorder process, history, complexity and other temporal aspects like afterthoughts or questions vestigial to the core 'scientific' concerns of stability and structure, order, synchronic comparison, and parsimony or elegance. Inasmuch as international politics are characterised by efforts to integrate and coordinate various social entities in order to prevent or reduce discordant changes and surprising outcomes, it makes sense for those who study international politics to pay more attention to questions of timing, 'time', and the problem of Time. So far, this has not happened, which begs the question of whether or not IR as a scholarly endeavor is attuned to its objects of analysis: Can we really hope to understand changing, discordant, multivalent and complex phenomena with models and frameworks that do not view these as legitimate outcomes of scholarly analysis? Can we really hope to comprehend the Time-bound realm of international politics relying on language symbolic of eternity? In addition to demonstrating the relevance of my timing-Time framework to IR, Part II of this project works to develop an initial response to such questions.

Conclusion

In this chapter, I developed a new framework for analysing Time in IR by building on Elias' argument about the relationship between timing and 'time' utterances, which is that timing engenders 'time' through the linguistic representation of relational activities. I extended this to construct a social theoretical framework oriented more toward IR and the problem of Time. In particular, my timing-Time framework suggests that we can treat theories themselves as acts of timing as long as they (1) integrate and coordinate multiple change continua using one continuum as a standard, and (2) produce temporal visions or 'time' utterances; explains how the problem of Time emerges and returns vis-à-vis timing projects; respects the empirical record of international politics; and provides a sound basis for analysing Time in IR theorising. Specifically, it identifies 'concepts of time', historical interpretations, and various metaphors for 'time' as symbolic references located along a spectrum of passive, active, and particularly challenging timing activities. Whether explicit or implicit, 'time' in IR theories refers to *scholars' efforts to time* various aspects of international politics—that is, to integrate and coordinate international politics in coherent accounts meeting certain standards, which in turn may provide guides to action. Unpacking the meaning of such utterances thus promises to elaborate and order the field's *relationship to Time*—especially why it recapitulates Time as a problem—and to tell us something about the extent to which the international

realm itself is *amenable to timing* and what sorts of *timing standards and metres* might be appropriate.

To locate this alternate course, I had to telescope outward quite a bit, and the discussion often ranged far from IR theory and concluded with a framework oriented back toward IR but admittedly still quite general. Charting IR's relationship to Time in theories of international politics requires telescoping back in on the question of whether and how the techniques, processes, and products of IR theory instantiate timing. In the next chapter I do so using narrative theory, which includes resources especially adept at drawing temporality out of the linguistic constructions that characterise social scientific theory.

2
Telling 'time'

For all our days pass away in Your wrath; we spend our years as a tale that is told.
– Psalms 90:9

Introduction

The previous chapter presented general arguments for how various 'time' utterances and especially the problem of Time result from linguistic transpositions of timing activities. I proposed that we can understand a wide variety of human activities, including the use of language to orient ourselves in the world, as forms of timing. *Timing* is any activity that works to integrate and coordinate multiple change continua using one continuum as a standard of reference and that produces a particular temporal vision and/or 'time' utterances. When timing is effective, it may become embedded and passive, and our symbolic representations of it take on more neutral and malleable qualities; but when timing struggles or fails, our symbolic representations treat challenges in timing as problematic features of Time itself. Furthermore, when timing is effective, it not only produces an intelligible and indifferent vision of 'time', it also helps us to time the wider, ever-changing world. Finally, language is not only a medium for representing timing symbolically, it is also a change continuum in its own right capable of providing a frame of reference by which we orient and coordinate ourselves with the wider world. This suggests that linguistic artefacts such as theories and narratives might be understood as forms of timing. However, this is as far as Elias' innovation takes us, which leaves the relationship between timing, theorising, and 'time' quite nebulous. In particular, my very basic rendering of timing still needs work if it is to directly engage the concerns of IR theory.

In this chapter, I address these issues with the help of narratology. Narrative theorists such as Paul Ricoeur and David Carr, among others, claim that storytelling provides a primary means of humanising existence by rendering discordant experiences intelligible and manageable. In particular, when confronted with the problem of Time, we enable action through the construction of understandable and meaningful accounts of otherwise confounding situa-

tions. This process revolves around the resolution of discordance by its inclusion in a followable plot. For these reasons and because it is fundamentally concerned with the linguistic representation of experiences, events, and actions, narratology provides an appropriate means of zooming in on the relation between Time and IR theory.[1]

However, although more attentive than most to the problem of Time, narrative theorists overlook the importance of timing. They also tend to treat the problem of Time as an exogenous force that humans confront with narrative rather than an endogenous symbol of challenging aspects of synthetic activities. Therefore, this chapter also brings the idea of timing to bear on narrative in order to provide a more complete account of how narrative actually goes about responding to the problem of Time with a cleaner, more intelligible *narrative temporality*.

The key is to show how narrative works as a *form of timing*. I do this through two parallel discussions. First, narrative is a *timing device*, or *productive of timing*, in that it provides a means for the orientation and coordination of human conduct in the world. Second, narrative is also a *timing product* comprised of multiple change continua integrated and coordinated by some standard. We can think of these as narrative's external and internal timing aspects, and they are emphasised in the sections on 'how narrative produces timing' and 'how timing produces narrative', respectively. Crucially, it is the narrative's own temporality—the vision of 'time' that it produces—that provides the link between these Janus faces of timing: the 'time' produced *within* the narrative by its internal timing operations *also* proffers a standard for timing action in the world *beyond* the narrative.[2] A narrative would be useless for coordinating our acts with the world if it did not present an intelligible and meaningful series of events within which we are located and able to act. This point links narrative and Western Standard timing, in which a clock produces a vision of 'time' that provides a standard for coordinating our actions. For example, the clock produces the notion and image of

[1] In the political and social sciences, narrative has long been associated with simply 'telling stories', and the opposite of 'serious research', theory, and/or explanation (see Ray 2009:131). However, philosophers have argued that '"narrative explanation" is no longer a contradiction in terms' (Mink 1970:544), and the gap has narrowed recently in IR and political science (see Bates, Greif, Levi, Rosenthal, and Weingast 1998; Suganami 1999, 2008; Lake 2011). However, these accounts tend to treat narratives and theoretical explanations as complementary but distinct. I go a step further to treat explanation and theory *as narrative*. As Onuf (2012:27) notes: 'Most books, even when they are … relentlessly abstract …, tell a story, more or less coherently, in accord with a plan which the author may or may not divulge.'

[2] I adapt this idea from Ricoeur's (1984:52–90) tripartite presentation of *mimesis*. Mimesis is both the act and product of composition (Ricoeur 1984:36). It has three parts: 'mimesis$_1$' refers to practical or lived experience, 'mimesis$_2$' to the construction of a narrative, and 'mimesis$_3$' to its reception by an audience (Ricoeur 1984:53, 46). My point also relates to the duality of 'narrative' as both 'an account of events' and the 'practice or art of narration' (Narrative, N. 2013). The narrator must comprehend some series of events in order to present them as a coherent story, but her audience must also engage in comprehension if they are to 'follow' that story from beginning to conclusion (see Ricoeur 1984:36–37, 1988:249).

'one-o'clock', which I can then use to coordinate actions by suggesting that 'we meet at one o'clock' so long as I understand how the timing system works.

The central task of this chapter is thus to establish the links between *timing a narrative, narrative temporality (or narrative 'time'),* and the *narrativised timing* of human conduct—to show that a story is a tidy, coherent, temporalized change continuum produced by timing other unruly change continua; and that this product continuum constitutes a timing device inasmuch as it suggests how to coordinate our acts with the world.[3] Although it may seem as if a story's facility for making sense of the world, its 'sense of time', and its ability to help us act successfully are quite distinct, I treat these as interrelated: we cannot act successfully and avoid calamities without understanding how the world works, and inasmuch as this competency flows through narrative it also involves some sense of 'time' as intelligible procession produced by the timing techniques involved in the activity of gathering together disparate phenomenal elements in a coherent whole.[4]

The chapter unfolds over five sections. First, I discuss a specific branch of narrative theory concerned with the narrative bases of action to establish *narrative as a timing device* that influences human conduct. Second, I explicate the crucial link between this and the timing that produces a narrative, namely *narrative temporality*. Third, I show how this vision of 'time' is a *product of timing* and articulate the specific *timing devices* that contribute to a finished narrative. Fourth, I draw out the reification potential of narrative timing, which serves to transform narrative timing techniques into generalised standards or metres applicable to a broader array of potential story elements. Finally, I show that problem of Time can still 'return' upon both its internal and external faces. The chapter concludes by combining these points with the discussion from chapter one to set the stakes and tasks for Part II of the thesis.

How narrative produces timing: a narrative theory of action

Narration is usually viewed as a retrospective activity, something that helps make sense of what has happened in life after the fact. We have experiences, and then we construct stories that make them more intelligible and less damaging. On this view, '[s]tories are not lived but

[3] I should point out here that by casting a narrative as a change continuum, I do not mean that every story is *constantly* changing or in some endless 'state of flux'. A narrative can be quite fixed but it still is comprised of a continuum of changes—the differences between linguistic characters or sounds, words, phrases, sentences, paragraphs, and chapters; as well as actors, settings, and themes. We could not take action on the basis of a narrative constantly in flux, for it would be impossible to identify the right action or the right 'time' to execute it in an ever-changing story.

[4] Though stories constitute and influence social agents, they are also 'told by agents acting as storytellers' (Suganami 1999:379), who must work to comprehend (gather together) pertinent elements in a coherent account.

told' (Mink 1970:557).[5] That is, narrative renders existence intelligible only retrospectively—we have to go through something before we can reconcile it in a narrative.[6] However, an alternative view within narratology refuses the discontinuity between narrative and lived experience. A *narrative theory of action*[7] contends that in addition to reconstructing past experiences, narrative also enables the lived present: 'life itself [is] a cloth woven of stories told' (Ricoeur 1988:246; Carr 1986:91, 96).[8]

On this account, plot themes and actions are just as intertwined in dynamic experience as they are in retrospectives because in both cases we have to make sense of ourselves and our world to go on (Ringmar 1996:66). Whether in dramatic scenarios or ultra-mundane moments:

> To be a conscious human being is to have intentions and plans … and the link between intention and execution is always rendered in narrative form. In this way story-telling becomes a prerequisite of action: … We tell ourselves what kind of a person we were/are/will be; what kind of a situation we were/are/will be in; and what such people as ourselves are likely to do under these particular circumstances (Ringmar 1996:73).

Likewise, Carr (1986:61; see also Steele 2008) argues that narrative is constitutive of action because 'we are constantly striving, with more or less success, to occupy the story-teller's position with respect to our own actions' while also acting as our own audience. And Ricoeur (1984:54) goes so far as to cast narrative competency as reliant on the ability to mimic and symbolise action in dramatic plots. It is not that we live life and then tell stories about it. Rather we first narratively constitute a situation in which we act with a view to bringing about some outcome. Afterwards, we use narrative again to reflect on the experience as a whole. In both directions, retro- and pro-spective, narrative intelligibility placates the discordant aspects of life and enables us to go on—we often feel as if we cannot move 'past' a problematic

[5] Mink's comment has become well known but his elaboration, which contains a flaw, is less well cited. Mink (1970:557) continues: 'Life has no beginnings, middles, or ends; there are meetings, but the start of an affair belongs to the story we tell ourselves later, and there are partings, but final partings only in the story. There are hopes, plans, battles and ideas, but only in retrospective stories are hopes unfulfilled, plans miscarried, battles decisive, and ideas seminal.' Yet life does have beginnings, middles, and ends—while writing this I am in my life's middle because I am neither new-born nor dead; humans may indeed know that they are starting an affair; and to claim that partings can only be final, hopes unfulfilled, plans miscarried, battles decisive, and ideas seminal. For one thing, to claim that something can be assessed as seminal only in retrospect is to have never met an aspiring artist or theorist.

[6] For a critical summary of this view, see (Carr 1986:9–15).

[7] The phrase is Ringmar's (1996:66–92).

[8] Ricoeur (1984:64) is more oblique than Carr, claiming only that time and narrative are 'figurative' in human actions. Carr thus criticised him for not going far enough although whether the two are actually at odds is doubtful, not least because Carr's critique was written while Ricoeur's trilogy was still being translated into English (see Carr 1986:8n14).

experience until we have understood it, but without some prospective understanding and anticipation, we also cannot 'get started'.[9] Thus, when analysing action we should look for *nested* stories in the form of retrospective accounts embedded in an ongoing autobiographical plot, all of which indicate something about how the actor can and should go on in the world.

The narrative theory of action increases the relevance of research on the relationship between time and narrative by expanding the pertinence of this relationship to the whole of lived experience. Yet narrative theorists so far have overlooked the idea that narrative is a *form of timing* in its own right. Ricoeur implies this by presenting narrative as a sort of baseline labour that constitutes our *orderly* and *manageable* sense of the 'flow' of time, or by calling narrative 'the *privileged* means by which we re-configure our confused, unformed, and *at the limit mute* temporal experience' (Ricoeur 1984:xi emphasis added). Similarly, Erik Ringmar (1996:76; Steele 2008:73) writes that 'neither the temporal nor the spatial present is a natural, hospitable, location which simply is "there" for us to inhabit. … The story we tell carves out a "now" as a moment in narrative time' that is quite tenuous. Carr (1986:94–95, see also 179) comes closer: 'to be a human individual is … to be always "located" in an ever-changing now. … But it is much more than this. … To exist humanly is not merely to be in time but to encompass it or "take it in" as our gaze takes in our surroundings'. He comes closer still when he notes that what our 'temporal gaze' or 'temporal *Gestalt*' is 'structured or configured' (Carr 1986:41). But despite such explications of how humans constitute a 'time' of experience and action to themselves using narrative, narrative theorists do not call this process a form of timing and thus unintentionally reinforce the sense that there are two separate 'times': the 'time' we constitute to ourselves, and an exogenous, problematic, and pre-existing Time 'in' which we exist. This is why they contend that our coherent experience and 'sense of time' depends on 'the constant attempt to *surmount* time in exactly the way the story-teller does' (Carr 1986:61–62 emphasis added). Although I agree with much of this way of thinking, its bivalent assumptions about 'time' elide the identity of narrative as a form of timing and thus reinforce the view that narrative opposes some extant and independent 'time'. Any such intimation of a 'time' before timing threatens to re-open several issues reconciled in the previous chapter, including the possibility of an objective and absolute existential 'dimension of time', the Kantian notion of a pre-formed 'intuition of time', and, ultimately, the aporetic character of Time—the yawning gap between an extant, natural Time and our sub-

[9] Similarly, although narrative cannot stave off biological mortality, its capacity to render a life meaningful and coherent provides a sop to ordinary finitude: 'I know that I was born and I know that I'll die / The in between is mine' (Vedder 2002).

jective experiences of 'time'. As throughout this project, my wager is that 'time' follows from rather than precedes timing. With regard to the current discussion, this means that any 'sense of time' related to narrative, even the seemingly exogenous and malevolent problem of Time that narrativised action seemingly 'surmounts', must be shown to be a *result* of the work of narrative timing.

Narrative temporality

Narrative replaces the chaotic totality of Time with an orderly temporal series that shows the actor how to orient himself in the world and when to undertake certain actions.[10] That is, narrative works to time by providing a delimited, manageable frame of reference by which he integrates and coordinates himself in the wider, dynamic world of experience and pays specific attention to the 'when-aspects' of his relationship to that world. When we 'carve out' or 'locate' ourselves in some 'now' and 'surmount' Time by effective narrativised action, we are using the story as an outward-facing timing device, and the narrative theory of action summarises this aptly.

Internally, the crucial entry point though which to appraise narrative as a product of timing is emplotment.[11] This is an activity that selects various aspects of experience and draws them together in an intelligible whole informed by some theme and unfolding over a durative sequence (Kermode 2000:45). I will elaborate the specifics of emplotment in the following section, but here I want to emphasise that this orderly, sequential, and durational whole is precisely the 'time' or *narrative temporality* produced by the narrative. This is the crucial link between the internal and external faces of narrative timing.

Narrative temporality is a product of successful timing inasmuch as it results from the synthesis of multiple change continua within the confines of the plot. We can understand this side of narrative temporality as the *replacement* of Time's discordant and multiplicitous flow with a quantitatively diminished, qualitatively enriched, holistic series. In this way, narrative temporality mimics Time's purported 'passage' without its more problematic qualities, such as overwhelming complexity, sheer novelty, or unbridled flux. 'Temporality' indicates that this is a *particular* product of timing in contrast with the totality-in-multiplicity of Time. To employ one of our central metaphors, while Time is a roaring river, narrative temporality is a

[10] Recall that rather than any extant, independent, or singular dimension or entity, 'Time' here refers to a *totality* of 'times' resulting from the multitude of timing activities and their relevant change continua that impinge upon our own timing activity.

[11] I borrow the term from Ricoeur (1984:66), for whom 'emplotment' is an activity that 'extracts a configuration from [mere] succession.'

tidy stream. 'Narrative' indicates that the timing standard is provided by the plot theme—in the internal sense, the plot theme provides the guide for emplotment; in the external sense it provides a guide for action. In other words, narrative temporality is the conduit by which the intellectual construct of the plot migrates outward to the world of action.

Narrative temporality is comprised of two features that effectively humanise some portion of Time (Ricoeur 1984:52). First, the plot sets a problem requiring action by some characters to release the tension (Ringmar 1996:73). This makes it *inhabitable* to humans inasmuch as it renders human agency possible and meaningful in the context of the story. It is crucial that the overall plot and its component parts be well integrated and coordinated for this to work, since we cannot act meaningfully in a situation that is incoherent.

Second, inasmuch as a story's components cohere meaningfully, narrative *unfolds* an *intelligible sequence* (see Ricoeur 1984:3). As long as it meets standards of completeness and appropriateness (i.e. all the necessary elements are included; all the included elements are useful), the plot propounds a self-sufficient '"field of occurrence"' (Carr 1986:23) in which every component has its proper place and purpose and nothing important is left out.[12] The intelligible sequence allows the audience to 'follow the "directedness" of the successive actions' (Ringmar 1996:73). Events emerge in this continuum, and the order and connections between them establish an 'arc' or 'trajectory'—a meaningful and successive interpretation. Although it may have additional spatial (e.g. cyclical, arrow-like, spiral) or normative (e.g. progressive, decline, apocalyptic, redemption) characteristics, the narrative 'arc' has a directional and serial structure as long as it makes use of 'before', 'after', 'then', 'led to', or other temporalized words.

Now it may seem as if this arc or storyline is just an arrangement of events 'over *the axis* of time' or at most a re-structuring of events that present themselves to our experience along this axis, which is mapped by the clock. These positions assume that such an axis preexists reckoning techniques and that events 'fall' along it of their own accord, yet just the opposite is the case. There is no single axis of time without the dominant reckoning technique that creates it, nor do events just naturally fall along it. Rather, *we plot* them along it by integrating and coordinating them with its enumerated standard—by timing. And when we configure events in a story we do not just plunk them down along that same axis, since to do so is to produce a bare chronology (one thing *after* another), not a narrative (one thing *because* of

[12] Ricoeur (1984:41) refers to 'complete' and 'whole', but since these are nearly synonymous I have chosen 'complete' and 'appropriate' to indicate that in addition to containing everything necessary to make sense of a given experience, the narrative must also *not* include anything irrelevant or otherwise unintelligible.

another) (see Ricoeur 1984:43; Carr 1986:45–72; White 1987:1–25). Rather, we *emplot* them in a linguistic continuum by integrating and coordinating them with the standard provided by the story's theme, and their order need not correspond with the order that the clock would assign them (e.g. the 'last' event as reckoned by the clock might be the first event told in the story, or might be presented at several points in the story). So when we say that a story (re-) structures events along or from '*the* axis of time', we are not doing anything other than re-affirming two sorts of timing: narrative and clock-based—although we *are* ahistorically elevating the latter over the former. The clock synthesises events against a singular, axial, enumerated continuum. Narrative is much more flexible, but no less an act of synthesis that produces a serially connected, linguistic continuum. In this way, every narrative unfolds *its own particular temporality*, which *need* not (but can) be the same as the unirectilinear, homogeneous, and neutral 'timeline' or axis constituted by clock-based reckoning.

Additionally, while the clock marks off punctual moments, the plot is a 'peculiar sort of unity-in-multiplicity' and more specifically an extensive 'temporal unity', *Gestalt*, or 'durative' present (Carr 1986:36). In such a 'temporal whole', the interconnections between elements and their location in the plot (their order of presentation) help disclose their intelligibility, reason for being, and ultimately allow them to be 'grasped' as a unity (Ricoeur 1984:66). It is in just such a 'present' that action can occur, inasmuch as the actor requires some grasp of the whole to know how to influence any of its parts (see Ringmar 1996:77). In a durative present, action at just the right moment—a certain location in the story's continuum—can correct, reverse, reshape, or apprehend the subsequent 'course' of events. It thereby marks the transmission of narrative competency as a form of timing *into* the narrative itself—understanding what is necessary in terms of coordinating continua of change arms a character in the plot with a 'sense of timing' and thus enables her to intervene decisively in a humanised situation (see Ricoeur 1984:52). In this sense, the plot is 'enactable', 'action-guiding', and 'normative'—it unfolds a plausible and malleable world that requires some intervention.

These basic constituents enable the narrative to propound a particular world, which includes some but not all of the elements of experience, with a particular temporality, which unfolds those elements in one way instead of another. This particular world unfolding in a particular way takes the place of the mangle of experiences that impinge upon existence. It is non-identical with 'the world' to which it refers and in which it is embedded, and its temporality is non-identical with Time's total flow, which is to say that narrative temporality is composed from change continua fewer in number and better coordinated than the change continua that constitute the environment in which the situation in question occurs. In place of

the welter of stimuli, the story offers an intelligible sense of flow that 'spring[s] forth' a universe of its own—a realm with no unconnected singularities or unintelligible accidents and an entirely self-contained structure (Ricoeur 1984:41–42). In this way, the story connects discordant elements to more intelligible ones to show how and why they happened and thus provides us with an explanation for them other than that they simply were 'brought' by the 'passage of Time'. This is what it means to say that narrative placates, manages, or tames the problem of Time.

This point also helps explain further why the problem of Time emerged in the first place. Ancient cosmologies served an explanatory function that helped Near Eastern peoples orient themselves in the world, coordinate their actions with it, and achieve greater levels of control. There is no reason to believe that such efforts to configure the pertinent elements of ancient experience into a cohesive and coherent story were free of significant challenges any more than ancient efforts to design an accurate and consistent calendar—in both, significant discordance had to be brought into harmony.

The emergence and split of time gods and the delivery of the human realm to the more malevolent ones served an important purpose in such timing efforts. Ancient cosmologies gathered together various, particular, and in some ways disparate[13] experiences of discord—all of which challenged timing activities of one sort or another—under the common symbol of malevolent Time. They thus replaced a multiplicity of timing-internal challenges with a single, external figuration that confronts human existence and is held responsible for whatever changes could not be attributed to other more intelligible and orderly factors. Although this effectively made Time a catchall for whatever could not be otherwise rendered intelligible, it was also an intellectual synthesis in its own right that moved ancient cultures from a host of idiographic timing challenges to the general problem of Time. The problem of Time thus marks an early and initial step towards overcoming timing challenges by emplotting them under a singular symbol in narratives about how the world works. It was a symbolic transposition of challenges to timing, emplotted in narratives addressing human experiences at a higher level of generality than would otherwise be possible.

In addition to explaining the historical record, this point helps to contextualise contemporary narrative theory: it now seems as if narrative responds *to* Time; but it was *a timing move in its own right* to emplot and steadily embed Time as a problematic agent in highly influential accounts of human existence in that various discordant changes were integrated

[13] For example, there is nothing immediately commensurate about death and surprise, or aging and sudden change, yet all are traditionally grouped under the problem of Time.

and coordinated in this single figuration, which thus helped ancient cultures to go on. That point in turn elaborates Elias' linguistic analysis: the problem of Time exemplifies the timing-'time' connection because it integrates and coordinates diverse challenges to multiple narratives and their subject matters as a single, synthetic, symbolic role player that directs attention to what must be managed or overcome for human endeavours to proceed and perhaps succeed. Time became a problematic feature of cosmological narratives as existential conditions required peoples to time in order to go on, and to time they had to develop techniques to accommodate discordant changes within extant accounts of how things work. An initial and crucial step in this process was to gather together disparate challenges to timing under the singular and malignant visage of Time. Then, over many iterations, the narrative process set a paradoxical relationship in which in order *to time* narratives must overcome the *problem of Time* by 'a series of rectifications applied to previous narratives' (Ricoeur 1988:247). But although crucial, this initial step was also a *minimal* one. Insofar as the problem of Time is a key actor in a story, that narrative's ability to comprehend its phenomena of interest is verging on breakdown since the prevalence of the problem of Time indicates a host of unexplained and problematic occurrences. Furthermore, when the problem of Time dominates it is difficult for the narrative to provide an effective means by which to time the wider world through human intervention, since the problem of Time indicates that human actions and plans are fleeting, enfeebled, and ultimately futile. Thus, *the balance between a story's produced temporality and its evocation of the problem of Time indexes its effectiveness as a Janus-faced effort at narrative timing*: it indicates how well the narrative gathers together and coordinates its given elements as well as its prospects for providing an adequate frame of reference by which to orient ourselves and intervene in the ever-changing world.

How timing produces narrative temporality

In addition to producing the temporal vision that offers a timing standard for action, emplotment is a timing activity in its own right. In both emplotment and the more familiar activities of timing with a clock or calendar, the goal is to bring some 'welter of unique facts' (Morgenthau 1965:171; Ringmar 1996:72) to heel in a more general framework. Timing does so by creative acts of 'intellectual synthesis' (Elias 2007a:60–61, 85), emplotment by 'semantic innovation' that accomplishes a 'synthesis of the heterogeneous' (1984:ix, 2008). Timing is a 'far from simple' effort to connect two or more change continua (Elias 2007a:60), emplotment is a complex negotiation to lend cohesion, coherence, and a sense of existential continuity to individual or collective experiences and lifespans (see Steele 2008:72). Much as timing

actualises a will to time, it requires narrational effort to synthesise selected elements with each other using the plot theme as the standard frame of reference. Finally, just like timing, narrativised experience is a perpetual process that may at any moment be threatened by discordant and surprising changes (Carr 1986:96).

Often, the plot also must hold some external audience's attention and gain their assent (see Dienstag 1997:4–6, 18–22).[14] In this sense, the narrator orients, integrates, and coordinates the audience with his vision of how the world works using the produced change continuum of the plot as a frame of reference. This elevates the narrative's particular temporality to a standard by which its audience is timed inasmuch as listeners or readers pay attention, envision, and perhaps enact the temporal sequence that it propounds, and it marks the first half of the transmission of narrative-internal timing to the world beyond it. The second half is that when these actions are successful, the narrative effectively *remakes* the world beyond it and the 'time' of that narrative replaces the Time of the world, if only temporarily. Thus, the internal timing activity of composing a plot facilitates the external timing activity of integrating and coordinating people and actions. When successful, we can say that we have *timed* some portion of the world using the *narrative temporality* produced by the *timing* activity of gathering together various change continua in a coherent and meaningful story. Once again, this is analogous to the way in which the mechanical clock produces the change continuum of repetitive and consistent step-wise motion, which provides a standard by which actors (who are external to its mechanism) orient themselves in the world and coordinate their actions.

One way in which emplotment might seem to differ from Western Standard timing is that it works by artfulness rather than by logic and rigour.[15] Whereas timing and especially standardised time reckoning seem to involve resolution by appeals to precision, consistency, and high levels of generality, emplotment proceeds more flexibly and idiographically. It is an exercise in putting puzzling and troubling experiences 'to work, in making them productive' toward a *thematic* and *dramatic* rather than a *conceptual* or *philosophical* resolution (Ricoeur 1988:261). Yet although there may be few other similarities between a story and the mechan-

[14] When narratives purport to be 'truthful', 'non-fiction', or at least not purely imaginary, coordination takes on added importance, since the emplotted events must be coordinated not only with each other and with the plot theme, but must meet higher standards of plausibility imposed by the audience's own narratives about how the world works. Non-fictive narratives cannot, in other words, simply communicate some amount of 'human interest and a semblance of truth sufficient to procure for these *shadows of imagination* that willing *suspension of disbelief* … which constitutes poetic faith' (Coleridge 1847:2 emphasis added). Higher stakes make for harder work.

[15] Our tennis example from chapter one sits somewhere in between these two because good tennis requires artfulness *and* a high degree of consistency (although nothing approaching the exactitude and monotony of a well-made clock); for an illustrative analysis of the relationship between tennis and mathematics, see (Wallace 1998).

ical clock, both represent a high level of synthesis that replaces discordance with harmony, novelty with intelligibility, and discrete changes with an interconnected, intelligible, and meaningful series. And while standard time reckoning resolves discord by coordinating various changes against recurrent motion and emplotment by coordinating 'goals, causes, and chance' against a particular theme, in both cases the result is the 'temporal unity of a whole and complete action' (Ricoeur 1984:ix). This temporal unity announces concord in place of discord, and whether 'told' by the clock or by a story, *it is the 'time' produced by successful timing*. However, these are not the same *forms* of timing. Both integrate and coordinate the change continua of experience with a constructed standard and indicate certain ways of going on in the world. But where the clock elevates a consistent, repetitive, and enumerated timing standard through the mechanical precision of an *escapement* (the device that allows for a steady, step-wise motion) or quartz oscillator; the narrative uses artful emplotment to elevate almost any intelligible and meaningful theme as a standard for orientation and action.

How does this artful effort proceed? There are four internal, complementary, and recursive timing techniques that integrate and coordinate messy, potentially divergent, and even incommensurable change continua into a coherent story. Emplotment proceeds by a *synoptic theme*, *creative filtration*, *temporal cleavage*, and *concordant discordance*. Because they are recursive and intermingle quite closely, it is impossible to explicate each mechanism independently of the others. The order of presentation begins with the timing standard, which is its synoptic theme, and moves toward the core of narrative's capacity to respond to the problem of Time.

Synoptic theme

The synoptic theme provides an idea by which the narrator understands otherwise disparate experiences as components of a single, coherent whole. This is a process of judgment in which experiences and their interconnections are interpreted with regard to the overarching theme so that an 'indigestible heap of data' (Mink 1966:185) becomes intelligible as a meaningful sequence leading as if by necessity from a beginning to a conclusion.[16] In Ricoeur's (1984:41, 142, 1985:61) formulation, synoptic judgment is fundamental to 'comprehension', the 'judicatory act of "grasping together"' various 'circumstances, goals, interactions, and unintended results' in 'one intelligible whole'. Synoptic judgment is also at the heart of Carr's 'temporal *Gestalt*'. Our ability to grasp a collection of experiences as a unity allows us

[16] Polkinghorne (1988:53) calls this 'configurational comprehension'.

to ‘take in’ a sense of connected temporal flow in the first place. The judgment process is scalable and embedded, since the events, processes, and experiences that we take in and use to compose a plot and temporal unity are themselves smaller interpretive configurations that resolve only against an overarching theme. I henceforth describe the scaling and embeddedness of synoptic judgments by distinguishing between *concrete themes*, which are singular but holistic plot ideas, and *general thematics*, which are formalised ideas about which kinds of plots are viable and which kinds are not. Another way to put this is that thematics are the overarching standards, established by the metanarratives, by which individual narrative themes are selected. Just as those individual accounts are nested within broader stories about their purpose and objectives, individual themes are embedded in general thematics.[17]

Both synoptic themes and thematics are timing standards. They provide a reference or rubric by which to ‘co-ordinate’, or to ‘arrange (things) in proper position relative to each other and to the system of which they form parts; to bring into proper combined order as parts of a whole.’[18] This process of building relations back and forth between parts and whole lies at the heart of both narrative and generalised timing. Although in other forms of timing a metric, celestial, or other standard of reference may be used, in narrative it is provided by the synoptic theme of the story.

Creative filtration

Compared with the overall flow of experience, only those elements that can be coordinated by the overarching theme and made to serve the plot can feature in the story (see Ricoeur 1984:67, 38; Freeman 1993:198; Steele 2008:19). Synoptic reference facilitates this by providing the standard for *creative filtration*, in which information is determined to be appropriate or extraneous to the plot. The filtration process diminishes complexity by reducing the quantity of change that must be accommodated in the narrative as a first step toward configuring a new change continuum known as the plot arc. But more than merely reductive, the process is creative because it constitutes elements of experience *as relevant or irrelevant* to the theme at hand. Filtration suggests weeding out extant ‘facts’ or ‘events’, but a narrative theory of action denies the pre-existing status of those elements—the experiencer is also an emplotter who constitutes them by synoptic reference. Synoptic judgment and creative filtration together offer quantitative and qualitative advantages to narrative timing: the synopsis proffers the standard of relevance by which creative filtration constitutes a reduced array of

[17] This distinction will be especially important in Part II.
[18] (Co-ordinate, N. 2013).

information more easily integrated and coordinated in a 'smooth' plot arc. Another way to put this is that creative filtration reduces the flood of Time to a domesticated sluice, or as Plato (2010:402c–d emphasis added) put it: 'that which is *strained and filtered* represents a *spring*'.

For example, when giving a narrative account of how a traffic accident occurred the theme of the perils of drunk driving constitutes relevant information—'a truck driver consumed *too many* pints, *sped* away from the pub, and collided with the sedan entering the intersection'—and irrelevant details—'the sedan was blue and upholstered in naugahyde'. A theme other than drunk driving, for instance a purely physical account of the collision of two vehicles, would not require and therefore not produce details such as the truck departing a drinking establishment or running a red light, but it might require and therefore produce information about the inferior crash-test record of the sedan. What counts as relevant depends on the theme, which provides the reference standard by which the narrator *creates and then filters* information.[19]

This example indicates that emplotment works less by its direct 'fit' or correspondence with reality than by its 'narrative coherence', or the question of whether or not all its elements relate clearly to the synopsis and to each other (Polkinghorne 1988:63). The interaction of synoptic judgment and creative filtration is how the story meets the standards of completeness and appropriateness mentioned earlier. The traffic accident might be described by a dense collection of GPS coordinates, velocity calculations, traffic light signal patterns, and compressive strengths of the two automobiles that *accurately* correspond to certain reality conditions. However, this has little bearing on the coherence of the account. Coherence depends on the synopsis alone, on the story's timing standard.

Cleaving Time

Because every narrative begins and ends, it must break apart the larger flow of Time, understood as the totality of all interacting or colliding continua of change that provide its object matter. The change continua gathered together in a narrative are usually treated unproblematically as a segment, period, or 'slice of time', but it is important to note

[19] The theme may be criticised as inadequate if it excludes elements that others find important, but this is a case of competing narratives inasmuch as the assessment of 'important but omitted' depends on synoptic judgments and creative filtration just as much as the criticised narrative.

that such periodisation results from a *cleaving* or splitting operation.[20] This refers to the process by which the narrator cuts up change continua so as to render them more amenable to integration and coordination within the confines of the plot. Temporal cleavage works in tandem with creative filtration to drastically reduce the elements of experience that the plot must gather together—while creative filtration helps determine which change continua will feature in the plot, cleaving truncates those continua, which even if few in number might go on indefinitely and thus resist emplotment.[21] In this respect, the 'temporal *Gestalt*' that narrative enables is both a holistic vision and 'a *closure* which articulates time by separating the given temporal configuration … from what goes before and after' (Carr 1986:41).[22]

As with creative filtration, cleaving Time proceeds by reference to the synoptic standard. The synopsis determines where continua should be truncated so that story begins and ends at points that best facilitate comprehensive integration and coordination. The beginning is a point or event before which nothing happened that is necessary for the narrative to work (Ricoeur 1984:38; Polkinghorne 1988:145). The ending provides the last word in the story both as the serial conclusion of events and the fulfilment of the story's meaning, so that the end of the linear sequence of sentences and events that compose the narrative also provides a symbol or statement of the overarching purpose of the plot itself. The ending is a 'closure' which by the operation of backward reference allows the beginning and middle of the plot to 'serve' its purpose, so that all previous elements are resolved with each other and the 'accounting or recounting' of the beginning and the middle in light of the end become, for the story, 'description and justification all at once' (Ricoeur 1984:67; Carr 1986:78, 61, 49; Ringmar 1996:73).

This indicates that the narrative's completeness and appropriateness may become apparent gradually, over the course of the story's unfolding, although its conclusion must tie everything off. At that point, and perhaps counter-intuitively, backward reference highlights the narrative's teleological inclination. Although we may not com-

[20] I prefer 'cleave' to 'periodise' because the latter is by now treated as a fairly normal part of the craft of history and because the former is a simpler and more descriptively violent verb for what is going on in this step of the activity of emplotment.

[21] As Gilpin (1981:11) notes: 'Because history has no starts and stops, one must break into the flow of history at a particular point.'

[22] Temporal cleavage closes the boundaries of what the plot must then synthesise, which indicates a broader recursion in which 'splitting' and 'lumping' are intertwined rather than opposed, as they are in scientific classification (see Darwin 1990:438 and 439n6). 'Cleave' can mean either 'to split' or 'to adhere' (Cleave, V. 2012), as when warriors in Homer's *Iliad* (1992:13.429, 13.543) cleave *together* in battle until one cleaves *apart* the other's helmet, or when 'a man [shall] leave his father and his mother, and shall cleave unto his wife: and they shall be one flesh' (Gen. 2:24).

prehend its full meaning until the very end, backward reference allows us to reflect on how the plot cultivated a 'sense of an ending' (Kermode 2000), a 'conclusion' at once chrono-logical (it comes last), hermeneutic (it completes story's construction of meaning), and cathartic (it 'finally' releases the tension set by the central dilemma).

Without some truncation of the change continua neither *telos* nor backward reference are possible, which makes it particularly difficult for the narrative to fulfil its synoptic objective. And bereft of a standardising theme, the multitude of change continua constitutive of Time bring 'just one damned thing after another' with many more 'damned things in between' (Arntzenius 2012:5–38), an overwhelming torrent of stimuli much like a river 'overspilling its banks' (Downie, Sinclair, Fay, Langlois, and Baker 1998). It is only between an appropriate beginning and end that a 'meaningful constellation' unfolds as a purposeful sequence in the midst of an otherwise incoherent flood of changes (see Polkinghorne 1988:18; Ricoeur 1988:274).[23] However, these endpoints set a certain task for the narrator, for she must cause everything in between to cohere. This means that temporal cleavage has an element of *proportionality*: if she wants to cleave longer chunks of change, this will necessitate more middle steps. The alternative is a *disproportionate* cleavage in which more stringent creative filtration brings the quantity of narrative ingredients back to a manageable amount but necessarily leaves out many steps between the beginning and the end.

In retrospective narratives, the narrator may cleave Time such that excessively problematic events are omitted from the array of elements that must be gathered together by the plot. Based on her selection of beginnings and endings, she can elide a premature death, a surprising failure, or any event inconsistent with the plot theme. Or by beginning the story a bit later or concluding it a bit earlier, she might ignore instances of internal pacification that would problematise a historical narrative that supports a nation-state's identity as an exemplar of freedom and respect for individual rights. Such acts of truncation complement creative filtration in a general move to purge from the plot those events that might prevent the narrative from constituting a temporal whole—an intelligible unfolding of an inhabitable world.[24] And it is these acts of purgation that set the array of story elements to be forced together—

[23] This sequence should not be confused with mere succession, chronology, or even chronicle because emplotment does more than simply delimit a boundaries around successive experiences (Polkinghorne 1988:18).

[24] Without cleaving and creatively filtering, a story must grapple with a limitless and unmanageable quantity of information. The tendency of historical narratives to either treat a limited period in great detail or an expansive period in more summary fashion attests to both the necessity of these devices and their complementarity.

that is, to be *timed*—by the narrator's use of synoptic judgment, and the final narrative timing device, concordant discordance.

Concordant discordance

Even after synoptic judgment, creative filtration, and temporal cleavage, emplotment must still deal with whatever novel experiences, destabilising events, and other forms of discord remain. If there were no discordant elements left, we would not need to exert much effort to configure them. Additionally, 'the *first* discordance is the fearful and pitiable incidents' that destabilise extant understanding and provoke the narrator to configure a plot in the first place (Ricoeur 1984:41 emphasis added), although these first instances often become the narrative's conclusion.[25] There is no need for narrative without discord, just as there is no will to time absent the need to integrate and coordinate problematic change continua. This point introduces the core challenge of narration: the condition of its viability is grappling with discordant change. Although it can eliminate much discordance by creative filtration and temporal cleavage, emplotment must still render some discordance harmonious, orderly, and intelligible. The pitiable experience must become a necessary or intelligible conclusion, and any problematic elements in the middle must help connect the start to the finish. Emplotment accomplishes this by putting the 'enigmas' that emerge in the flow of Time 'to work', so that what was initially discordant becomes a productive *concordant discordance* (1984:22, 70–73, 1988:261).

Concordant discordance through metaphor

Before delving into narrative it is helpful to introduce concordant discordance through the work of metaphor, which—although more limited than narration—contains the kernel of narrative's response to the problem of Time. Metaphor is a semantic operation that 'lends', 'transfers', or 'carries over' meaning from a familiar concept to an unfamiliar and discordant experience by 'figurative' (re-) description (Ricoeur 2008:331).[26] This indicates a tension between a known reference, which is 'alien' in the given context, and the foreign element of

[25] 'The human mind works, so to speak, backwards' (Carr 1939:2).

[26] (Metaphor (n.) 2012). Other understandings of metaphor can be found in (Aristotle 1926:3.10, 1932:21; Mooij 1976:18; Ringmar 1996:70); although its most unsettling description is 'an affair between a predicate with a past and an object that yields while protesting' (Goodman, quoted in Ringmar 1996:70).

that context to which it lends meaning (Ricoeur 2008:17).[27] To employ metaphor is to mobilise that tension, to produce concordant discordance that bridges a gap in language, which may attend novel experiences or changes in the flow of Time. This is no smooth movement from ready reference to new, pristine referent, but rather the creative 'emergence of a *new congruence* at the predicative level' that grapples with an unprecedented and discordant referent (Ricoeur 1979:156).[28]

Metaphor produces a *semantic* gain by disrupting a literal or 'proper' framework of meaning in order to establish a new, figurative, and 'impertinent' meaning that bridges some gap in language exposed by experience. But this semantic gain comes at a *logical* cost since the new meaning 'emerges from the *ruins* of the semantic pertinence as it appears in the literal reading of the sentence' (Ricoeur 1984:x, 23 emphasis added). Much more than rhetorical ornamentation, metaphor actively and simultaneously 'deconstructs' and 'reconstructs' reality by perpetrating a 'category-mistake' or 'intentional error' in the midst of an extant linguistic framework so as to expand that framework's hermeneutic frontier, where novel things await integration and coordination (Ricoeur 2008:23, 24). This is a 'poetic' transformation at the level and speed of basic language that works whether the mode of presentation is self-consciously poetic, narrativistic, theoretical, or philosophical (Ricoeur 1984:6, 2008:30). A metaphor is thus a literary device rather than a logical tool, and like narrative its effectiveness depends not on universal consistency and rigour but on a complex interplay between extant understanding and the foreign experience that it domesticates (Aristotle 1926:III.10; see Ringmar 1996:72).

It should be noted that while it relies on novelty to grapple with discordant change, metaphor cannot be *too* novel. This is because it emanates from known meanings and because we cannot learn something that has *no* connections to what we already know.[29] When it successfully applies manageable novelty to the discordant experiences that Time 'brings', metaphor designates 'continuance in expiring duration' (Ricoeur 2008:27)—it overcomes a previous linguistic framework's inadequacy for describing reality by turning a dead-end into

[27] Actually, metaphor is 'doubly alien, as a present but borrowed word and as substitute for an absent word' (Ricoeur 2008:20, 17)

[28] For example, the fluvial metaphors so pervasive in our descriptions of 'time' are not properly or literally linked to it. This supports Ricoeur's critique of philosophical treatments of time, which regularly rely on fluvial metaphors 'in order to talk about the *upsurge* of the present or the *flowing* of the unitary *flux* of time' (Ricoeur 1988:243 emphasis added) but cannot meet internal standards of consistency and rigour without also implying that 'time' is 'wet', composed of two identical and one other primary elements (H_2O), or capable of changing state under temperature changes.

[29] Once again, I adapt this point from (Suganami 1999:372).

a bridged gap that ensures that language remains a *continuum* of change.[30] Whereas the problem of Time chronically *surprises and dissolves* stable understandings, 'metaphor *astonishes and instructs* rapidly' because its literal novelty works in conjunction with a figurative potential 'hidden' therein (Ricoeur 2008:37 emphasis added).

One further implication of metaphor flows from Ricoeur's (2008:115) distinction between living and dead metaphors. In living metaphor the creation of meaning remains near the semantic 'surface', so that it is obvious that a literal reference is being pressed into figurative service. By contrast, a dead metaphor is 'not declared but hidden in the "elevation" of the concept that is expressed as such' (Ricoeur, 2008:305), so that we tend to forget the transposition and to 'normalise' the referent object as described literally by the metaphor. Dead metaphors substitute wholesale for their referent instead of connecting it with known ideas and thereby impose conceptual and social orders as well as 'certain power structure[s]' manifested 'in people's unreflective, everyday, actions' (Ringmar 1996:84).[31]

The two types of 'time' utterances that concern us, the neutral-abstract vision of Western Standard 'time' and the problem of Time, are dead metaphors. Both the abstract/neutral and problematic predicates of the objective noun 'time' resulted from metaphors that forced various challenging experiences in timing together with images of empty containers, clean and straight lines, malignant deities, malevolent patriarchs, or perilous fluids. These metaphors died long ago when their impertinent and figurative links became normalised as literal identities in the cosmological narratives of the ancient Near East or in Enlightenment discourse. Thus, 'time' utterances exemplify a 'pre-eminent philosophical gesture', a 'movement of elevation and absorption … by which worn-out metaphor is concealed in the *figure* of the concept' (emphasis added Ricoeur 2008:339–40).

[30] Ricoeur also means that the *passing away* of the proper, complete meaning of the pre-metaphorical term is what makes possible the creative response to some enigmatic event.

[31] In addition to the specific metaphors for Time and its traditional antithesis, eternity, address throughout this project, living and dead metaphors abound in IR. Beginning with the deceased: 'state of nature' (Hobbes 2009), 'balance of power' (Little 2007), '*contain*ment' (see Chilton 1996:190–202), 'order' (Bull 1977), 'structures' (Waltz 1979; Wendt 1992; Buzan 1993:93; cf. Suganami 1999:383), '*levels* of analysis' (Singer 1961; Wendt 1992; Wight 2006), 'spill-over' in 'resurgent' regionalism (Hurrell 1995:348), theories as 'models' (Kremeniuk and Sjostedt 2000; Kilgour and Wolinsky-Nahmias 2004), '*path*-dependence' (Pierson 2004:17–53; Bennett and Elman 2006), scholarship as an 'intervention' (see *Interventions: International Journal of Postcolonial Studies* and Routledge's 'Interventions' book series), 'ruptures' (Walker 1993:2, 27; Nolin 2006), 'cyclical' violence versus 'linear progress' (Wight 1966; Walker 1993), mathematics (Marks 2003:23), and 'progressive' versus 'degenerative' research programs (Adler and Crawford 1993; James 2002; Elman and Elman 2003). In the less populous land of the living: 'state as person' (Wendt 2004), international politics as a 'game' with 'rules' (Putnam 1988; Kratochwil 1989; Onuf 2012), norm 'cascades' (Finnemore and Sikkink 1998), some instances of 'scars' (Steele 2012), the 'Anglo*sphere*' (Vucetic 2011), and 'economic man' (see Griffiths 1995:66). Such imaginative profusion is a characteristic of a first-order, descriptive discourse that has yet to become categorical, systematic, philosophical, or logical—that is, speculative rather than properly conceptual (see Ricoeur 2008:355–58).

Concordant discordance in narrative

Like metaphor, narrative labours to turn discordant experience into concordant discordance.[32] Since a story must contain everything it needs and everything it contains must have a proper function and 'place' in the plot, any discordant changes not handled by filtering or cleaving must be *transformed* within the plot by reference to the synoptic theme. A discordant experience that impels the narrative becomes concordant once it can be shown to be necessary or unsurprising in light of the way the plot unfolds.[33] Discordance in the middle is re-tooled as a plot 'driver' that propels the course of events toward the conclusion. Inasmuch as both serve to semantically alloy discord, they effectively mitigate the problem of Time.

Jarring, incongruous, and conflictual incidents seem to come 'out of nowhere' when they confound the extant narratives that we inhabit. At that point, we must either (re-) integrate and (re-) coordinate them with our extant narrative or—in particularly problematic cases—configure a different narrative altogether in order to close the void of meaningless opened by discordant experience. When we (re-) emplot discordance as concordant discordance, incidents arrive unexpectedly but still serve 'a causal sequence in which one thing leads to another"' (Aristotle 1932:52a4; quoted in Ricoeur 1984:43). When successfully re-tooled, enigmatic events can even become a story's most '"marvellous" things … those strokes of chance that seem to arrive by design' (Ricoeur 1984:43).[34]

For example, thanks to the narrator's ability to comprehend (grasp together, synthesise) bare discord as an integral and 'steering' component in a collection of events, an otherwise troubling, idiosyncratic experience becomes a crucial 'turning point' that redirects the course of events toward a different conclusion (e.g. Woolsey 1919:187). At its extreme, this describes the 'tragic reversal' in which the protagonist's best efforts have unintended and opposite effects that not only thwart her goals but threaten ruin. Although the protagonist does not realise that such 'shocks' are 'reversals' when they first emerge, they become meaningful

[32] Ricoeur (1984:43) originally refers to 'discordant concordance', but reverses this to 'concordant discordance' when it refers to a 'formal principle' at the 'narrative level' (Ricoeur 1984:70, 73).

[33] This is the basic process of 'narrative intelligibilification' (Suganami 1999). None of this means that we could not tell a story about the unreasonable, meaningless, and utterly random. But such a story still has a plot theme—the meaninglessness of life—and points a moral—that we have to reconcile ourselves to this fact, so it still effects a limited sense of concordant discordance by gathering together of a collection of discordant elements under a single theme with an (implicit) guide to action, which is to stop searching for anything more and become a stoic or a nihilist. Absent such a theme, a story about random, meaningless events is no story at all—it is an unhelpful chronology.

[34] The ellipsis in this quote marks a substantive elision of 'the height of the discordant' because I disagree with Ricoeur that such chance occurrences that 'arrive by design' are the height of discordance, which is actually *sheer novelty*—something so new, surprising, and strange as to defy comprehension.

as she realises (that is, as she comprehends or re-emplots) how they produce a conclusion with a new moral.[35] This is a reversal of fortune in two senses: the protagonist's fortunes are reversed by unforeseen incidents, but 'fortune' itself is reversed by the plot's ability to render discord as a surprising yet concordant incident that is 'necessary and probable' (Ricoeur 1984:44). This marks the great power of emplotment to 'purify' discord, to ensure the 'followability of the story' (Ricoeur 1984:44, 207), and thus to purge the problem of Time (its tendency to 'bring' unintelligible or pitiable experiences) from the narrative's temporal unity, in which everything makes some minimal amount of sense and drives the plot toward a meaningful conclusion.

As with the other narrative mechanisms, concordant discordance proceeds by reference to the timing standard provided by the synoptic theme.[36] The plot arc only becomes a *continuum* of change—that is, a connected series—when the narrator effectively emplots all the elements deemed necessary and appropriate so that the course of events manifests the synoptic theme. Any discordant experiences that cannot be creatively filtered or cleaved must become intelligible and meaningful steps on that course. Since we cannot bring an experience 'in line' with the rest of the plot if we do not know where the plot is headed and what lesson it aims to communicate, concordant discordance is a crucial timing device that integrates and coordinates a problematic change using the synoptic theme as a standard.

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When synoptic judgment, creative filtration, cleaving Time, and concordant discordance are effective, a story flows easily: characters, information, and events seem to arrive 'at just the right time', and the entire plot continuum seems to move forcefully toward a conclusion. If not, a story 'meanders', 'loses momentum', or otherwise fails to deliver its message. This is why good storytelling depends on a sense of timing. Although they do not explicitly identify the connection, when Ricoeur (1984:66, 52) observes that narrative 'draws together from [some] manifold of events the unity of one temporal whole', or that it '*attains its full meaning when it becomes a condition of temporal experience'*; when Carr (1986:61–62) describes emplotment as an 'attempt to dominate the flow of events by gathering them together in the forward-backward grasp of the narrative act'; and when Polkinghorne (1988:20) describes em-

[35] In drama, the audience to the tragic reversal is well aware of this thanks to greater information provided to them than to any individual character and to foreshadowing.

[36] Ricoeur (1984:66, 244n14) hints at this timing angle in discussing how emplotment *synthesises* heterogeneous experiences into a unified and meaningful series that serves and represents the theme.

plotment as 'a dialectic process that takes place between the events themselves and a theme that discloses their significance and allows them to be grasped together as parts of one story'; they all characterise narrative in terms quite similar to Elias' definition of timing as the act of integrating and coordinating two or more change continua using one continuum as a standard of reference—in narrative-internal timing, *the plot theme provides that standard*. By breaking apart the activity of emplotment into these four techniques, we can see how each step toward a full narrative is a part of the timing process of grappling with discordant change, and therefore why narrative theorists view emplotment as a way to mitigate, discipline, or even tame the problem of Time. In Part II, I will return to these four devices and the narrative theory of action to uncover timing concerns at work at various moments of IR theorising.

Before moving on to the two remaining sections, I should point out here that the narrative temporality and timing devices introduced in this section further elaborate Hutchings' *chronos*/*kairos* (*C/K*) distinction, introduced in the literature review. Recall that *kairos* is the 'message' of time which interrupts the consistent, homogenous, and unitary 'medium' of *chronos* in order to 're-shape what "happens"'; that scholars concoct various mixtures of *C/K* to create 'timely' theories; and that both action and theory involve diagnosis in prescription (see also Ricoeur 1984:55; Hutchings 2007:25 n5, 8, 21–22, 25n7). All this connects with the narrative theory of action and with the narrative timing devices just introduced. Much as narrative competency requires a sense of timing—an ability to effectively coordinate relevant change continua according to an overarching standard—*kairotic* effect depends on intervention at a propitious moment, which is impossible to identify without an overall grasp of an unfolding situation, the problem within it, and how alternative acts might resolve this problem. That is, the *kairotic* identification of 'the right time' for intervention depends on a grasp of the course of events accomplished by synoptic judgment and a capacity to render discordance concordant within a given array of change continua creatively filtered and cleaved from the totality of experience. However, the 'natural', homogenous, and unitary flow of *chronos* (Hutchings 2008:21) is just as much a product of effective narration as *kairos*, although compared with any one idiographic 'moment of opportunity', *chronotic* flow requires significantly more repetition in narrative to congeal as the natural and objective status quo that *kairos* then interrupts. Hutchings openly acknowledges the metanarratives underpinning various theories, but my treatment of narrative further suggests that *chronos* and *kairos* emerge within the inner mechanisms of narrative timing. This explains why *chronos* and *kairos* both instantiate a 'world political time … understood in unitary terms'—because they each emanate

from some singular narrative propounding a particular temporality (i.e. unfolding a manageable and self-sufficient world).

From narrative timing to timing metre

Although humans cannot transcend the Time-bound realm they can mitigate its effects by effective narrative, which replaces the staggering totality of Time with a manageable temporality composed of an intelligible and orderly series of events, and by successful action, which cues on that narrative temporality and effectively remakes the world in its vision. As Carr (1986:61) notes, 'for the most part, our negotiation with the future is successful. We are, after all, able to act'. This signals successful emplotment and is evident in both great accomplishments and in mundane activities like bathing, dressing, commuting to work, cooking meals, or reading and writing.

Successful emplotment and action encourage repetition and reification. At the level of narrative composition this is because the very act of configuring a plot involves some reflection upon the event in question, and this 'carries with it the capacity for distancing itself from its own production' (Ricoeur 1984:xi, 1985:61). At the level of action it makes sense to routinise and habituate successful actions whenever possible. It is easier to generalise and apply extant narratives to related situations than to configure new accounts from scratch for each different situation. To begin anew in each instance would abnegate the timing benefit of narrative's ability to propound a world that refigures *discrete* and *idiosyncratic* experiences in *synthetic* and *general* frameworks for action.[37] Additionally, generalised and routinised narratives and narrativised actions lends our overall experience a greater sense of continuity and order, much as any particular narrative lends a particular experience a sense of continuity and order. When narratives and the actions they facilitate are generalised and routinised long enough, this comforting sense of continuity and order may come to seem like a *natural* quality of existence. But in fact, this is a human achievement based in part on the adaptability and repeatability of narrativised actions. Much like symbolic language in the previous chapter, the distancing quality of narrative helps to mask the dynamic, practical origins of 'time' . When we transfer effective narrative from one situation to another, we iterate successful timing. As this occurs, and especially as active timing becomes passive and embedded in social life, it becomes easier and easier to reify and naturalise such successes as evidence of 'universal' or immutable structures or more suggestively 'timeless' laws of society and nature,

[37] In Elias (2007a), successful and passive timing is necessary to move beyond the challenges that confronted prior generations so that we can devote finite intellectual and practical resources to other challenges.

even though these structures and laws only emerged in stories lived and told. For instance, compelling stories about isolated human actions produce imputation of 'human nature', or plot arcs that subsume multiple empirical episodes become 'laws' of history. Although these instances of reification appear quite different because of their openly narrative form, they are perfectly analogous to the example of Western Standard 'time', in which a lengthy series of timing successes produced the neutral vision of a natural, homogeneous, empty dimension of existence (Carr 1986:42; Elias 2007a:85).[38]

Reification may also result from the opposite. Whenever discordant change destabilises extant frameworks of coordination, the 'annoying orneriness of things' combined with our own ordinary finitude may lead us to yearn for immutable laws, structures, or some other source of reliable order to the world such that we can go on (Carr 1986:43). Because life is narrativised, we *always* need to inhabit *some* working story that substitutes a narrative temporality for the larger flow of Time, and the temptation to transfer, routinise, and ultimately reify a previously successful narrative against new discordance is an understandable move to reinstill confidence in the 'comprehensibility of existence … a certain warm, fear-repelling narrowness and confinement to optimistic horizons' (Nietzsche 2001:235; also Elias 2007a:106). The question is not whether a given narrative is actually suited to the novel situation, but whether it is more suited than any other we posses. Yet, once again this necessitates a trade-off, since the discordance—which engenders the need for a working narrative—threatens to expose the narrative as merely idiographically applicable. This in turn exposes our attempt to reify a working narrative into a generally applicable law, principle, existential given, or 'received wisdom' as a 'semi-religious' form of 'intellectual extremism' (Carr 1986:42; Elias 2007a:106; Levine 2012:15).

In cases of successfully routinised and reified narratives, we become more familiar with the narrative than the (many) experiences it describes. In cases of emergent discordance, we lean on a familiar narrative to grapple with something foreign. Both cases unveil the *full identity* of narrative and timing—even our most common view of timing as clock-based reckoning—because they show how narratives function as *standards* for different situations. Once transferred and routinised, a working narrative becomes the *standard frame of reference* by which to integrate and coordinate new change continua, a *measure* of emergent expe-

[38] We might go further to combine this point in a historical examination of whether the root of the idea of 'time' as an empty dimension along which events are 'slotted' or emerge is the product of a discovery, made as ancient peoples embraced narrative, that the order of events matters a great deal. This would suggest that the idea of 'time' as an empty dimension is coeval with the emergence of narrative but awaited much later developments in mechanical timing for its realisation. Etymologically, such a question is supported by the Proto-Indo-European root for 'time', *di-mon*, which means to cut up or divide (see Time, N. 2013).

rience, an *automatic technique* for reckoning with discord. Once reified, a narrative's timing devices become a *narrative timing meter* that directs audiences to take a particular *con-figured* story that makes sense of some experience and use it to *pre-figure* additional experiences, which necessarily vary to some degree from the first.[39]

Although they initially function dynamically in a creative and recursive process to time discordant experience, all narrative timing devices are vulnerable to reification. We might *fixate* on a synoptic theme and apply it broadly to comprehend disparate experiences without investigating alternative themes. For example, 'modernity is the story of reason's triumph over superstition' or 'the trend is clear: In the Middle East and throughout the world, freedom is on the march',[40] even though other themes apply to the modern era and to current affairs in the Middle East. We might *conflate* creative filtration with ontological difference so that information deemed irrelevant by a particular synoptic theme becomes irrelevant to a whole genre of stories and domains of practice—as when scholars aver that culture, belief, or morality are 'not what politics is about'. We might *naturalise* a temporal cleavage and thus render past or future evidence as irrelevant and consigned to different stories altogether. For instance, the fetishisation of 1648-present as the 'age' of the 'modern international system' and 2003-2011 as 'the Iraq War' establish chronological barriers within interconnected and ongoing change continua that do not necessarily reflect how things have gone and inhibit accounts that might include 1647 or 2012-present. Finally, we might *concretise concordant discordance* as an objective and freestanding 'fact' divorced from its narrative location. For examples, the Treaties of Westphalia 'birthed' the modern international system, or 9/11 is a world historical 'turning point'. Once reified, these narrative timing devices lose their sense of give-and-take with empirical evidence, and become metrics within which new experiences must fit to matter at all.

Reification also affects narrative temporality, the intelligible unfolding of an inhabitable world. Whereas emplotment *produces* these features through a dynamic and wilful negotiation with the continua of change treated by the narrative, reification *objectivises and externalises* narrative temporality into a freestanding and fixed vision of a world and a 'time' divorced from the plot that produces them as well as from any human effort. The particular un-

[39] Once again, this formulation owes much to Ricoeur's (1984:52–90) tripartite presentation of mimesis (see p. 66n2 above). Mimesis$_{1\text{-}3}$ is the process by which we move from pre-figured experience (1), which may include discordance, through con-figured narrative (2), in which discordance is re-tooled as a productive element, to re-figured action (3), in which we enact and inhabit the world unfolded by the narrative (Ricoeur 1984:53). In a narrative theory of action, the three parts are recursive and internal, since lived experience (1) results from the self's reception of the plot (3) that it has itself configured (2).

[40] See (Bush: Freedom on the March 2005).

folding of a limited and thus inhabitable world that the plot configures becomes a static or even structural 'concept of time' in which change is minimal or utterly homogeneous and the spectre of discordance is thus assigned an 'outlier' or otherwise marginal status. Insofar as reification persists, the world propounded by the narrative gets conflated with 'the world' external to it—fixed themes, naturalised cleavages, hardened distinctions, and concretised episodes of concordant discordance export the narrative's qualities of inhabitability and manageable dynamism to 'the world' and *seem* to neutralise the problem of Time decisively. While successful narrativised timing remakes a particular part of the world temporarily by virtue of its artfulness and relevance, a reified narrative timing metre imposes itself more broadly, lengthily, and perhaps impertinently.

At this point, we can re-calibrate three primary points about general timing, drawn out near the end of chapter one (see pp. 58-59), to summarise the *narrative form of timing*. Recall that the current discussion moves entirely within the fourth point, which is that linguistic artefacts such as narratives and theories are worth considering as timing activities. The remaining three points can be dedicated to narrative as follows:

1) *Narrative timing* is an activity that,
    a. Works to integrate and coordinate multiple change continua using a *plot theme* as the standard of reference and,
    b. Creates and presents a particular series—that is, a *narrative temporality*—and/or 'time' utterances;
2) Timing *within the narrative* renders discordant change continua more intelligible and less problematic by making them *serve the overarching theme* or *'drive' events toward a fitting conclusion*, and we paradoxically think of this as the narrative's ability to *respond effectively* to the problem of Time, which is held responsible for discordant changes;
3) Insofar as this *internal narrative timing* (2) is effective, it not only produces an intelligible vision of 'time', it also helps us *to time* the world *outside* the narrative—that is, to integrate and coordinate certain aspects of the wider, ever-changing world (which includes or own actions) using the narrative's representation of 'time' as a standard of reference. This indicates that narrative timing is *Janus-faced*: the story both results from *and* provides a means of timing.

The return of the problem of Time

However, no single timing device—not even the exemplary mechanical clock—can comprehensively integrate and coordinate all change continua. The totality of changes that interact in relations of coordination or conflict persists as long as continua of change continue to change, and at any moment this totality may forward discordant change. In more colloquial, less Eliasian terms, Time goes on indefinitely but narratives and other timing activities cannot. So no narrative or other timing activity can decisively ensure itself against future discordance or ultimately surmount Time. Furthermore, as creative filtration and temporal cleavage underscored, every narrative leaves something—in fact many things—out (Spivak 1990:18–19) as a condition of its ability to intelligibly unfold a plausible, self-sufficient cosmos. As plausible and self-sufficient that cosmos must elide what was ignored in the process of its creation.[41] Therefore, narrative remains vulnerable to the problem of Time even as it purports to manage, tame, or transcend it. No narrative can accommodate the totality of even the portion of Time that it cleaves, nor can it accommodate all future changes that impinge upon it, and this means that the problem of Time persists as long as narrative timing (and therefore Time) does.

Because they play crucial roles in the timing process that narrative accomplishes, the problem of Time can return to confound any of the four narrative timing devices discussed. The synoptic theme represents a practical or even arbitrary elevation of one idea over others. To be viable, it must facilitate successful emplotment in the process of the narrative's creation but there is nothing about an effective synoptic idea that entails perpetual facility or continual relevance—it may at any moment collapse under the weight of its elements or of additional developments. There is also nothing about the process of creative filtration that ensures that what gets left out of the narrative will not become more relevant, in the near future as the narrative is appraised for plausibility or the distant future as more changes accumulate. Likewise, no Time cleavage can ensure that the ongoing flow of time will not bring about circumstances that recast once-appropriate beginnings and ends as arbitrary acts of 'censorship' that silence critical considerations. Finally, since it is artfully employed rather than decisively inoculated, concordant discordance is a tenuous accomplishment. In the continued flow of Time, successfully emplotted discordant changes may subsequently take on different quali-

[41] In fact, we cannot even accommodate every detail in a given temporal cleavage without risking satire: '"And then came the grandest idea of all! We actually made a map of the country, on the scale of *a mile to the mile*!" / "Have you used it much?" I enquired. / "It has never been spread out, yet," said Mein Herr …' (Carroll 1893:169; see Borges 2000a).

ties, additional relevance, or reveal additional layers of meaning that threaten to bust the constraints of the synopsis or open up a 'gap' in the plot arc.

Therefore, in the paradoxical fashion that we have been tracking for two chapters, we can say that flow of Time tests just these timing devices that make possible narrative temporality, and it is understandable—if paradoxical—that narrative theorists view narrative coherence and the problem of Time in a confrontational relationship. A narrative only 'works' initially if it proffers a meaningful theme, includes all relevant information and excludes extraneous details, produces an appropriate beginning and conclusion, and poetically resolves all problematic incidents in between. That is to say, it becomes coherent to the extent that it times the change continua that impinge upon its object matter. This narrative only 'stands the test of Time' and becomes more generally applicable to the extent that it *also* resists effacement by additional developments, that it *continues* to integrate and coordinate change continue—which continue to change.[42]

This situation becomes even more fraught in the narrative theory of action. Inasmuch as it facilitates action, the coherent truth of the narrative is a condition of our ability *to go on.* All actions—and especially routinised and habituated ones—are threatened by discordant changes that unsettle the relations of coordination provided by narrative. This is why *emergent* discordance sometimes presents as *emergency*—a 'critical situation' characterised by 'an unidentifiable sense of threat', anxiety and the possibility of chaos (Steele 2008:52). Emergencies threaten autobiographical narratives (Steele 2008:73), but also cosmographical accounts that provide an orderly stage for human action. It can be especially disconcerting when our basic vision of how the world works falters because in this case discordant change threatens *sheer incomprehensibility*. So it is not only any individual narrative or even the general act of narration that the problem of Time contests and chronically confounds but the very condition of a feasible existence—a comprehensible situation amenable to human efforts. When Time becomes a river in flood, narrative is our best hazard insurance but its term and coverage remain quite limited.

Given the linguistic origins of 'time' utterances it is unsurprising that at this point, even as we work to overcome emergent discordance by re-emplotment or by an entirely new narrative, our discourse *evokes* the problem of Time, i.e. the problem of Time 'returns' to the

[42] This is the common meaning of the phrase 'standing the test of time', as in (George and Bennett 2004:229), although its connection to an ongoing timing activity is usually overlooked. Changes that may efface narrative coherence include (but are not limited to) societal alterations that render the plot theme normatively unacceptable, the emergence of new evidence that problematises the story's internal organisation, or truly novel events that impinge upon the story's object matter but for which we have no ready explanation.

linguistic foreground. Problematic change throws off coordination and may lead to disintegration, so we externalise this by adding problematic predicates to the 'time' of the story or to the larger flow of Time itself. Just as with any other timing activity, when the problem of Time returns in language it signals that narrative comprehension is faltering or failing altogether. I use 'evoke' here, as opposed to 'invoke' or 'refer to', because the former indicates 'calling forth', 'calling to mind', or 'summoning up a memory from the past', all of which aptly describe the place of the problem of Time in ordinary language. To 'invoke' or 'refer to' is to call upon an explicit idea or agent, which would suggest that during their revisions narrators explicitly and self-consciously call 'time' a 'problem' to be solved. However, as the historical summary and inclusion of fluvial metaphors for 'time' in the introduction indicated, the problem of Time is quite deeply embedded and largely taken for granted in ordinary language. Thus, its relevance to linguistic artifacts such as narratives and theories is not to be identified solely by *explicit* or *self-conscious references*, but also by the *implicit evocations* enabled by the intellectual lineages, linguistic practices, and cultural traditions implicated in the production of those artifacts.[43]

We can now overlay the key features of this chapter on the diagram of 'time' utterances and timing presented in the previous one. This connects key steps of emplotment to generalised timing, links narrative reification to efforts to tame the problem of Time, and maps the move from narrative temporality to freestanding 'time' onto my earlier account of how 'time' utterances emanate from timing practices. It therefore provides an illustrative synopsis of the argument presented over both chapters, and reinforces my contention that narrative is a form of timing (see fig. 4, p. 94).

This augmented diagram now sketches three spectrums crucial to the discussion developed in Part II of the project. It traces the moves from *responding provisionally* to the problem of Time to trying to *decisively transcend* it, from *particular timing devices* to *general timing meters*, and from *timing with narrative* to *reified narrative temporality*. Such spectrums are not directionally specific—timing activities and narrative 'times' move back and forth along them and the problem of Time ebbs and flows depending on the interplay between coordination and change or narrative and experience. They are meant as a heuristic device to guide the examination of time in IR in the next part of the project. But they also reinforce my wager about what various 'time' utterances indicate in a field of discourse—when the problem of Time is foregrounded, timing is active and challenging; when more neutral,

[43] This has implications for Part II, in which I adopt the methodologically permissive approach of drawing out implicit, explicit, and occasionally self-conscious references to the problem of Time in IR theory.

abstract ‘times’ feature, timing is successful and perhaps passive. Zooming in on narrative timing does not change that bet, it simply provides resources most appropriate to unpacking timing, ‘times’, and the problem of Time in the theoretical discourse of IR.

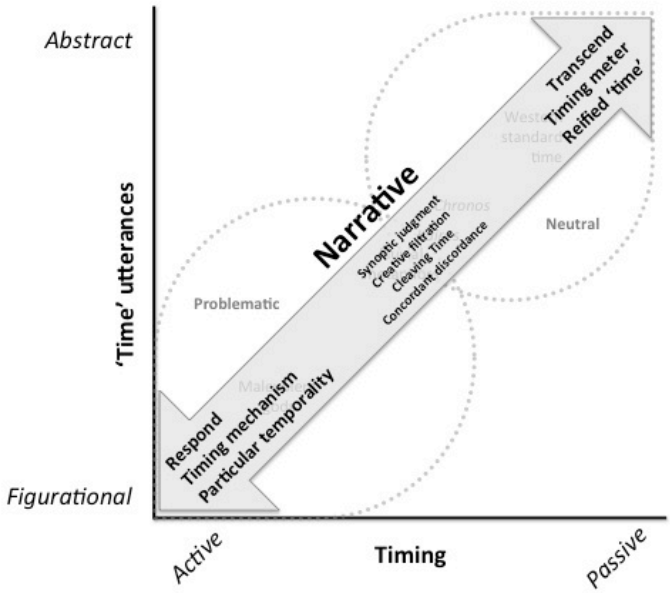

Figure 4: Narrative timing and reification

Conclusion to Part I: Telling ‘time’ in IR theory?

Summary of Part I

Because this chapter concludes Part I of the thesis, I close with a synoptic summary of the arguments presented to this point. In the introduction to the project, I forwarded the problem of Time, a malevolent figure that enjoys dominion over human affairs, as an under-acknowledged but important tradition in time studies and IR. I also reviewed IR and other literatures concerned with time to illustrate why this project develops its own framework for analysis. Chapter one then introduced and expanded Elias’ work on timing to provide a more capacious explanation of the multitude of ‘time’ utterances we find in the literature and in ordinary language and to elaborate and defend the merits of the problem of Time in social theoretical terms. The current chapter presented narrative as a form of timing and discussed how narrative comprehension responds to the problem of Time in both experience and retro-spection. In particular, it added nuance to the timing-‘time’ framework via four narrative tim-

ing devices that replace problematic Time with narrative temporality and by discussions of narrative's vulnerability to reification and to the continued flow of Time.

Taken together, chapters one and two present the following argument:

> To be human is to exist amidst multiple and persistent *continua of change*, some of which we must *integrate and coordinate* in order to survive, develop, and thrive beyond a life of mere subsistence (which still requires coordination in the form of foraging). In other words, in order to go on we have *to time*. When successful, timing may produce neutral 'time' utterances. When challenged by *discordant* changes, timing may produce laments about the *problem of Time*. Furthermore, expanding and proliferating interconnectedness by successful timing projects increases our ability to do things but also the potential for additional and new sources of discordance, so it is a *structural feature* of the general activity of timing to continually grapple with discordant change and therefore *to perpetuate the problem of Time*.
>
> In particular, we use *narrative* to accommodate discordant changes and thereby maintain a sense of existential coherence that allows us to *comprehend* our experiences and to *act* in the world. Narratives are produced by *emplotment*, a dynamic process of configuring change continua into a *holistic* account that meets all the criteria by which *timing* is identified and produces 'time' utterances. *Narrative timing* replaces the total, overwhelming *flow of Time* with a particular *narrative temporality*—the *intelligible unfolding* of a *self-sufficient* and *inhabitable world*. It accomplishes this through four *narrative timing devices*: *synoptic judgment* gathers together a heterogeneous collection of experiences and events as a whole, and provides the reference standard for the other three mechanisms; *creative filtration* constitutes various change continua as relevant or not to the synoptic theme and thus produces fewer and more amenable plot elements than the totality of experience provides; *cleaving Time* truncates relevant change continua at points that provide the appropriate beginnings and endings of a plot 'arc'; and *concordant discordance* 'smooths' that arc by turning discordant experiences into intelligible events that 'drive' the story toward its conclusion.
>
> Whether they work or because we face new sources of discordance, it is tempting to *generalise* and *routinise* successful narratives and narrativised actions across situations. This *reifies* a particular narrative into a *timing meter* in that we

use it to pre-figure how we *reckon* with *emergent discord*. We *fixate* on a particular synoptic theme; *conflate* creative filtration with ontological difference; *naturalise* the segment cleaved from Time as an episode, period, or era; and/or *concretise* concordant discordance into a freestanding 'fact'. These in turn elevate and *externalise narrative temporality* as an *objective, independent 'time'* divorced from human effort.

However, *Time*—the *totality* of timing activities and relevant *change continua* that impinge upon our experience of the world—goes on, so although effective emplotment mitigates the overwhelming flow of Time with an ordered temporality, *no story can decisively transcend the problem of Time*. As Time goes on and new changes emerge, pragmatically or arbitrarily selected synoptic themes may become problematic; information creatively filtered as ir/relevant reverses sides; temporal cleavages censors important episodes or processes; and hitherto concordant-discordant events reveal deeper or simply new implications that resists a 'smooth' movement from beginning to conclusion. This throws the *coherence* or *truth* of the narrative, and by implication the ability to enact it, into doubt. This returns even effective narration to the *structural relationship inherent in all timing: because there is no will to time without discordant change, the problem of Time never disappears completely* and when it returns in the form of *novel*, *complex*, and *fluid* situations it can require laborious efforts to re-integrate and re-coordinate by adjusting the narrative or to begin anew on a different plot altogether. It also engenders significant anxiety, so discordant events mark '*critical situations*' in which the intelligibility and coherence of our narrativised existence comes into question. Even as we work to accommodate these moments, evocations of *the problem of Time* return to the linguistic foreground, may feature in the rectified or new narrative, and thus burrow further and further into our symbolic-linguistic consciousness.

Implications for IR

Beyond the various researches on time, what is the upshot of all of this for IR? How can general claims like 'timing produces "time"' or paradox-tinged ones like 'narrative is a form of timing that grapples with the problem of Time and produces its own vision of "time"' inform our understanding of IR theory? It can do so by demonstrating that IR theories are efforts *to time international politics with narrative*—to integrate and coordinate international change

continua using a standard of reference that allows them to replace discordant changes with orderly and intelligible accounts. Three primary steps are necessary.

First, we need to establish whether IR scholars live a narrativised existence in the sense that they benefit from the external aspect of narrative timing posited by the narrative theory of action. Are their *identities as scholars* informed by metanarratives about the academic vocation of providing useful accounts of international politics? Do they work to (re-) emplot discordant experiences and evoke the problem of Time in their discussions of those experiences? In short, is their vocational life woven from stories told? Chapter three presents an analysis of key moments in IR's disciplinary development. I argue that IR constitutes itself through critical situations in which, in response to discordant change, scholars rectify extant narratives about international politics in order to assist political actors and to re-produce their own vocational metanarrative, and that in doing so they lament the problem of Time.

Second, we need to examine whether IR scholars *intentionally* rely on narrative timing in the internal sense and whether they understand this as a means to grapple with Time. Even if theorists recapitulate the narrative theory of action and lament the problem of Time in critical situations, a more compelling case for understanding IR as a narrative timing project arises if I can show that scholars also rely on narrative in more composed settings. From this point on the discussion focuses almost exclusively on the inward-facing *production* of intelligible narratives using narrative timing techniques. This is because my concern is IR *theorising* rather than international political practices and the impact of IR theories on them.[44] Chapter four scrutinises three prominent methodological stances for recommendations about replacing the problematic flow of Time with narrative temporality. This suggests that through narrative timing we can understand scholars' initial reactions to intellectual emergencies as continuous with their more careful and self-conscious reflections on how best to make sense of phenomena. In this chapter, I begin to deploy some of the narrative timing devices developed above. In particular, I show that each methodology imposes a thematic as a timing standard and how this helps unfold a vision of an inhabitable world

Third, we need to examine whether IR's finished outputs manifest the internal aspect of narrative timing—that is, whether they are produced by timing activities that accomplish some temporal vision. So chapter five examines how various forms of IR explanation employ narrative timing devices to produce particular narrative temporalities, and how their themes

[44] Other than chapter three's focus on how the external timing function of narrative serves to remake action within the academy, I assume throughout the rest of the project that as a narrative gains traction with some policy or practitioner audience, it becomes more likely that it will be enacted and thus serve *to time* international political processes.

relate to the methodological thematics found in chapter four. This discussion concludes the overarching argument that IR grapples with the 'Time-bound' quality of international politics through a Janus-faced endeavour to configure coherent narratives that replace the problematic flow of Time with more manageable temporal sequences that make sense of the world, and thereby suggest ways in which political actors can avoid calamities and effect positive outcomes.

Although the basic argument is complete at this point, a critique of IR theorising is not because I have left out a large part of the field that appears resistant to my analytical framework and substantive claims, namely quantitative IR, which seems off-limits to narratological analysis. In chapter six, therefore, I examine whether quantitative approaches can also be understood through my narrative timing framework. If I can show that quantitative IR utilises narrative timing devices, and especially that it reifies them into a timing meter that prefigures how to reckon an international politics always on the verge of ruin, then I will have made a more compelling case for the importance of narrative timing to considerations of how to theorise international politics in light of that realm's close association with the problem of Time.

Part II

Narrative timing in IR

3

Old Time in new models: A narratology of IR

In the universal recasting of values attendant upon a catastrophe which is reshaping the entire world, the student of history is summoned to take stock, not so much of where he stands, as of whether he is drifting.

– Louis Martin Sears, 1918[1]

[H]istory … shows that reliance on "repetition" can be shattered by genuinely "unprecedented" happenings.

– John Herz, 1959[2]

"Surprise," the philosopher Charles Sanders Peirce noted, "is our only teacher."

– Charles Kegley, 1993[3]

Introduction

The first part of this project developed a general relationship between timing and 'time' utterances and identified a particular sort of narrative timing more relevant to social and political theorising. However, more work is required to clarify and elaborate the relationship between narrative timing and the problem of Time, on the one hand, and IR theorising, on the other. It remains to be seen whether the academic discourse of international relations[4] manifests the problem of Time, and whether its scholars evince narrative timing in the course of developing theories. This chapter fulfils the first task through a narratological examination of three of IR's crucial disciplinary episodes.[5] Drawing on the narrative theory of action, it argues that IR's self-identity is constituted in part by a narrative reply to the problem of Time.

[1] (Sears 1918:202).

[2] (Herz 1959:17).

[3] (Kegley 1993:142). Peirce's (1933:36 [5.50]) actual statement is: 'Experience is our only teacher.'

[4] Because this chapter treats WWI, an event prior to IR's institutionalisation as an academic field, I follow Schmidt (1998:14) in using the 'academic discourse of international relations' to acknowledge the fuzzy identities of scholars concerned with international politics prior to the mid-twentieth century. Once the discussion turns to the thermonuclear revolution and the end of the Cold War, I employ 'IR'.

[5] Chapters four and five fulfil the second.

More precisely, the academic discourse of international relations responds to discordant changes by modifying, rectifying, or replacing extant accounts of how international politics work; scholarly reactions to such changes lament the problem of Time; and this process reproduces a vocational metanarrative about developing useful knowledge for practical dilemmas.[6]

The three episodes, World War I (WWI), the thermonuclear revolution, and the peaceful end of the Cold War, will be familiar to any student of IR's disciplinary history. Likewise, my discussion of the havoc wrought by surprising, troubling, or otherwise discordant changes covers well-travelled ground. However, the problem of Time and narrative theory of action running through these episodes have been so far ignored, so finding supporting evidence for this relationship hiding in plain sight in the foreground of some of IR's most crucial moments strengthens my argument about the importance of narrative timing and the problem of Time for theorising international politics.[7] It suggests that, like all humans, IR scholars 'trace the course of their history in terms of some *framework of meaning* which gives them a sense of *continuing identity* amidst the *flux of time'*, although because IR is a collective endeavour its continuity emerges from 'competing "minds" and "schools" of thought' rather than a single, unified narrative (Niebuhr 2008:83 emphasis added; also Carr 1986:163).

Additionally, the episodes add some international political flesh to the relatively skeletal account of 'discordance' with which I have been working. They indicate that discordance is a multivalent sort of resistance to the integration and coordination that timing pursues. WWI was only *somewhat unexpected*, but what was most shocking about it was the *scale and efficiency* of slaughter it introduced. Thermonuclear weapons on the other hand presented nearly *sheer novelty* in the form of *global cataclysm*. And the peaceful end of the Cold War, while generally a *welcome* event in that it was a non-violent conclusion to decades of tension

[6] This metanarrative is quite consistent across varieties and eras of academic discourse on international relations. My discussion should not be confused with a claim that outside or 'real-world' events directly shape theories (see Schmidt 1998) or that dissident theorists are always trying to destabilise 'theoretical habits of mind during 'sufficiently fluid' historical situations (Falk, quoted in Kegley 1993:132; see also Wohlforth 1998:655). And though in some ways my argument approaches Kuhn's (1962; see Banks 1984:355–56) view of paradigm shifts, in which external events pose problems for established theories and eventuate their *replacement* by theories that better explain the problematic events, I view IR as quite un-Kuhnian because little in the field fulfils his criteria for a paradigm (Jackson and Nexon 2009; Onuf 2012) and because no IR paradigm, theory, or worldview has ever been consigned to the dustbin of history so decisively as the theory of the ether or the geocentric universe.

[7] Rather than providing confirming evidence of an empirical regularity or general law, they illustrate the narrative theory of action hard at work in the some of the field's signal moments. I am content to argue transitively that just as it is hard to imagine IR without its engagements with WWI, nuclear weapons, and the end of the Cold War; it is hard to really understand the field's practical constitution without a narrative-Time dynamic.

and competition, remained unsettling simply because it was *unexpected*. Taken together, these examples suggest a variety of ways in which change can resist the integration and coordination on which timing relies and thereby engender the problem of Time. Discordance can be expected yet appalling, utterly unprecedented, or welcome but surprising. It is also peculiar to the extant framework in question, so I treat different strands of IR in each episode depending on which working narrative(s) of the world of international politics struggled to accommodate the change in question: liberal internationalists in WWI, classical realists in the thermonuclear revolution, and scientific IR in the end of the Cold War.

Since this discussion flows from the narrative theory of action, I treat each episode in four steps. First, I briefly summarise the extant narrative(s) of international politics prior to discordant change. Second, I introduce the change itself and show how it confounded integration and coordination within the working account(s). Third, I identify the problem of Time in scholars' initial reactions to change. Fourth, I trace what they proposed to do to make sense of the change and the importance of this for the field's identity. Taken together, these steps suggest that the scholarly activity of IR comports with the narrative theory of action: when they confront discordant changes, IR scholars revise stories of the world, re-confirm a metanarrative about the purpose of such stories, and evoke the problem of Time along the way.[8]

World War One

Extant narrative

At the turn of the twentieth century, several liberal narratives viewed war between the great states as highly improbable (see Holsti 1998:39; Howard 1984:41). These included stories about economic interconnectedness (Howard 1984:42); a 'new era' of 'unbroken peace and steady material progress' where the constraint of public opinion would be sufficient to instil respect for international law and to deter potential wrong-doers (Suganami 1989:79); and increased tourism, education and democratisation. These narratives complemented a general sense of stability and optimism on the part of practitioners and scholars of international politics.

[8] Two objections may be made here. The first is that this is an entirely banal point: *of course* theorists adjust their theories to fit experience. However, such similar discursive evidence across scholars and critical situations suggests that the narrative theory of action and the problem of Time are integral to key moments in IR's history. This rebuttal may then arouse a second objection, which is that claims that situations are unprecedented and therefore require further investigation in order to refine theories are just effective ways to 'pitch' manuscripts for publication rather than reliable indicators that theorists are narrativised actors grappling with a 'Time-bound' existence. However, even if 'merely' rhetorical, this move is still indicative in its effectiveness.

Not everyone shared in this optimism. The 'prospect of universal war' was of concern to 'pacifists and militarists alike' (Seton-Watson, Wilson, Zimmern, and Greenwood 1915:vii). But even after it became apparent in 1914 that just such a prospect was about to be realised, many national populaces embraced the prospect because of extant attitudes to combat. For one, a patriotic battle death was still glorified as heroic, noble, and exceedingly rare—cause for celebrating the perfection of 'manliness and good learning' rather than for grief and sorrow (Cannadine 2012:195–96). For another, it was assumed on all sides that the war would be short, sweet, and constrained, much like those of the recent past. This is epitomised in reports of British soldiers declaring they would be 'home by Christmas' as they departed for France in August 1914 and that journalists travelled to the front without spare underwear (see Mount 2012). Such a mixture of liberal, internationalist, and heroic narratives created a peculiar orientation—because it was deemed highly unlikely *and* an opportunity for glory, the prospect of a general war in Europe became a *rare opportunity* for heroism opened up to millions of young men by mass conscription.

Discordant change

Against these extant narratives, WWI became one of the 'most shattering experiences of the twentieth century' (Suganami 1989:79; V. 1922:60) precisely because it was long, constant, and decidedly un-heroic. While they were no strangers to the idea of war, early twentieth century populaces were completely unprepared for the 'unimaginable' scale and efficiency of killing made possible by mechanisation (Cannadine 2012:196). This is why even observers worried prior to the war felt as if 'the great war came upon us like a thief in the night' and raised 'subjects and issues hitherto unfamiliar' (Seton-Watson et al. 1915:vii). What made WWI so shattering was that it did not fit extant understandings of violent conflict as a rare opportunity for glorious death. Although *feared* only by some, the war was inadequately *foreseen* by all, and so its actual prosecution seemed to have 'changed everything' (Latané, quoted in Suganami 1989:79).

Scholars interested in international politics attested to this almost immediately. WWI was both familiar and novel: 'There is nothing new about the fact of war' since 'war itself is as old as the world', yet '[w]hat is new about this war is the scale on which it is waged, the science and skill expended on it, and the fact that it is being carried on by national armies, numbering millions, instead of by professional bodies of soldiers' (Seton-Watson et al. 1915:5). William Jennings Bryan (1915:264) was equally taken aback by mass slaughter that was 'so great that the mind can scarcely comprehend it'. For Frederick Maurice (1928:25)

what 'was without precedent was that from the first day to the last the guns never ceased firing.' To all three, the war was deeply unsettling precisely because it did not accord with their expectations of how war was unfolded or what it meant. In some cases, scholars explicitly acknowledged that extant narratives of politics and warfare were rendered inadequate. For James Thompson (1921:566), since there was 'nothing in the past comparable or applicable to the present' WWI shattered the 'shibboleth' that '"History is philosophy teaching by example"'.[9] Likewise for Bryan (1915:266), this was 'such a war as history has never known!' Thus, it called for much soul searching about how and why the extant narratives about the possibility and consequences of the war could be so wrong and the 'existing system of international relations' could be so 'woefully inadequate' and 'out of harmony with the fundamental facts of modern life' (Beer 1916:71).

Scholarly reaction: the problem of Time

WWI also called forth the problem of Time explicitly or in references to chaos and fluvial metaphors. It represented a 'testing time' for democracy (Seton-Watson et al. 1915:1), in part because events were 'passing rapidly and impressively before us' in such an 'unheralded and unparalleled' manner that the 'whole picture of our human world completely changed within a week' (Call 1915:12, 11). Charles Merriam (1922:318) wondered whether social scientists were doing enough to keep 'abreast of the rapidly moving times in which we live'. Elsewhere, WWI was a 'time of stress and strain' and an 'age of destruction' (Woolley 1915:204, 203) in which the 'present are days of sorrow, and the world's life is tragedy now' (Turner 1917:483). Nobel Peace Prize winner Elihu Root (1921:227) looked back on WWI as an incident in which 'the passion of the moment' led the world into 'chaos and savagery'. In connecting the war to the problem of Time, Root had plenty of company (Beer 1916:73; A Society of Nations 1919:35; Woolsey 1919:1989; V. 1922:64; Burton 1923:162; Kiss 1923:108; Lerchenfeld 1923:31). In these ways, scholars' reactions corresponded with soldiers in the trenches who, despite having unprecedented access to standardised time reckoning, stopped checking their watches because 'the shadow of death lay on the dial' (quoted in Kern 1983:293).[10] Elsewhere, the author James Joyce summarised it most vividly when he wrote that the war produced 'time' as 'one livid final flame' (see Kern 1983:293; Joyce 1992:23).

[9] Alternatively, it confirmed that 'time is a great teacher, but unfortunately it kills all its pupils' (Berlioz, quoted in Singh 2005:270).

[10] It should be noted that standardised time reckoning did little to quell the many unpredictable facets of war and in fact exacerbated some (see Kern 1983:268; Hom 2010:1165–67).

There was no shortage of fluvial metaphors either, which described events as born along by the violent rush of Time. The statistician Frederik Hoffman (1923:61 emphasis added) claimed that the 'present *drift* of international politics is toward chaos and a possible return to the dark ages of half a thousand years ago.' Alfred Zimmern (1936:92–93) similarly remembered the war as 'a break-through, in the grand style, of the forces of disruption'. And it was common for scholars to label the war and its aftermath as a period of 'flux' (Warburg 1920:602; V. 1922:60; Patterson 1927:36; see also Sylvest 2004:409).

Narrative rectification

Confronted with a highly discordant experience, scholars recognised the need to rectify or abandon the narratives that had made sense of the world until 1914 (Root 1921; see Suganami 1989:79). It was not only desirable to make WWI 'well known' (Turner 1917:483); many considered it the *duty* of scholars to comprehend the conflagration. Invoking Augustine (1993), Seton-Watson and colleagues (1915:13) wrote that scholars and statesmen must '"rise above tempests … to build higher and stronger … the walls of that city wherein the souls of the whole world may assemble."' Sears (1918:206) was more pointed: 'Can you in decency sacrifice truth to patriotism or patriotism to truth? Or if your path of investigation happens to be innocuous, is it fair to pursue favorite researches into Mesopotamian tablets or the origin of Pseudo-Isidorean Decretals when your country calls for just such talents as you possess for an exposition of her own historical evolution which made the war inevitable?'

It was also deemed important to re-secure knowledge against the rush of Time (Sears 1918:203). This desire provided critical—if harrowing—momentum toward a new academic field dedicated to international politics: 'The war of 1914-18 made an end of the view that war … could safely be left in the hands of professional diplomats. … The science of international politics has, then, come into being in response to a popular demand. It has been created to serve a purpose and has, in this respect, followed the pattern of other sciences' (Carr 1939:2). Having understood the Great War as a 'testing time' for democracy, scholars understood that their task was to help democracy ace the exam by developing better knowledge about war. The emerging science[11] quickly fixed upon the identification of WWI's cause(s) as the best way forward (see Taylor 1996:8). For Bryan (1915:270), by 'knowing the cause, we may, by avoiding it, avoid the consequences.' More optimistically, by identifying the

[11] Some called this a return to the 'science of government' of the nineteenth century (Seton-Watson, Wilson, Zimmern, and Greenwood 1915:13).

causes of war scholars could isolate the discordant present as a historical idiosyncrasy and pave 'the road to permanent peace' (Bryan 1915:270 emphasis added; see Sylvest 2005:274–75). They thus complemented the newly formed League of Nations, which represented a 'new method' meant to 'conduce to a better understanding, particularly between the Great Powers, than had existed in the years before 1914' (Zimmern 1936:1). Bryan (1915:265) located a culprit in 'the doctrine that "might makes right"'. For Seton-Watson and colleagues, it was the failure of populaces to influence the correct ministers, who in turn relied on an inadequate tradition of balance of power politics. For others, the 'immemorial and enduring cause of war' was 'group egoism' in the form of 'nationalistic patriotism' (Hankins 1922:505). And still others rediscovered the importance of international anarchy as a defining feature of international politics and even a cause of the war itself (Dickinson 1916; see Schmidt 1998; Sylvest 2005:274).[12]

Modifications to extant narratives corresponded to the causes identified. Bryan wanted to apply and individualistic moral code to the relations between nations, in part through perpetual and all-encompassing treaties stipulating dispute resolution exclusively by international commissions (Bryan 1915:270). Seton-Watson and colleagues (1915:3) claimed the problem could only be solved by 'full Democracy' and universal education. Alternatively, a harmony of material interests combined with a 'genuine inter-state' to subordinates nationalist tendencies (Hankins 1922:522–23). And for those focused on international anarchy, international institutions could assist and even insist upon dispassionate reasoning at critical moments when national sentiments tended toward the opposite; while organised sanctions and other coercive mechanisms would discourage potential international lawbreakers (see Suganami 1989:79–80). Once such modifications had been developed, analysts rediscovered a sense of optimism alongside each new cause identified. Even though he initially admitted that the mind could 'scarcely comprehend' the war, once Bryan (1915:270) understood that the culprit was 'might makes right', he had such confidence in the solution of international treaties 'that a thousand years from now the name of Woodrow Wilson and my name will be linked together in the capitals of the world'.

Such responses were consistent with appraisals of the war as shocking but not utterly novel. For one thing, the onset of war was not entirely unexpected. For another, the most di-

[12] Prior to the war, explanations for political violence had been 'rather crude' and focused on 'the actions of wicked, aristocratic and war-like statesmen and diplomatists' (Sylvest 2005:30), but in the face of a conflict set off by the leading lights of civilised Europe such explanations were clearly inadequate. Sylvest contends that this shift was already underway prior to 1914, but was greatly accelerated by the hostilities. Suganami (1996) notes that liberal internationalists and realists alike pointed to international anarchy as a source of conflict, although the former offered a wider range of possible solutions.

rect ‘confrontation with the grotesque newness of everything’ was restricted to process of warfare rather than the political processes that led to war (Kern 1983:291). As a result, WWI was ‘shattering but not fatal to the belief’ in peaceful progress through liberal principles and practices (Waltz 1959:8). For others, it confirmed a larger story about humanity in the midst of a lengthy and at times torturous moral development (Seton-Watson et al. 1915:5). Although there was a noticeable shift in emphasis from individual morality to institutional restraint and from trust to coercion, in the new science of politics, the foretold outcome of peaceful progress remained the same, and WWI quite rapidly and paradoxically became confirming evidence of the imminent demise of major war. This quick return to pre-war narratives after an initial period of shock and intellectual instability was exemplified by Norman Angell who, after a most succinct bit of soul searching, asserted in 1914: ‘No, we have not been “successful”. We have merely been right’ (quoted in Sylvest 2005:274).

Scholars thereby re-emplotted WWI. By lightly reworking extant narratives, they transformed an initially discordant experience into one more step—albeit a rather conspicuous one—along the familiar path to peace. Although it was no doubt shocking, WWI in many ways did not approach the sheer novelty or utter discordance that vitiates narrative integration and coordination and engenders a complete breakdown of comprehension. Quickly re-armed with re-tooled stories, scholars could even enlist the very ‘horror of war’ as a mechanism that ‘prepared the world for more ambitious cooperation for the maintenance of peace’ (Sylvest 2005:275). J.A. Hobson (quoted in Sylvest 2005:281 emphasis added) exemplified the relative ease with which scholars brought concord to the discordant experience of WWI and thus re-secured the academic discourse of international relations from the problem of Time: ‘important *changes* in human conduct ... do not normally proceed by slow insensible movements; there is an element in them of the *catastrophic*. This, as biologists now recognize, is no violation of the law of *continuity’*. In the wake of the catastrophe of WWI, then, unfinished political and intellectual projects of international progress were not in doubt. They only required minor recalibrations.

The thermonuclear revolution

Extant narrative

Prior to the full thermonuclear revolution that occurred in the mid-1950s, political realism had secured a place for itself in American IR through the works of émigré scholars like John Herz and Hans Morgenthau and of the noted theologian Reinhold Niebuhr. Although there were significant differences between the three and their many interlocutors, realist narratives

about international politics generally revolved around the perennial quest for and balance of power under international anarchy, the analytical primacy of the state and the political primacy of its security and survival, and the institution of limited war as a policy instrument (Morgenthau 1948:4; Herz 1950, 1951; Niebuhr 2001:4, 2008:5, 2011:4, 173). Though it would eventually be destroyed by 'some fortuitous dislocation of the proportions of power' or 'in the long run by the social animosities which a balance of power creates and accentuates', an equipoise of political powers remained 'the highest goal to which society could aspire' (Niebuhr 2001:232, 231, 2011:173) and 'an essential stabilizing factor in a society of sovereign nations' (Morgenthau 1948:125). When combined with the fact that states must prioritise their security and independence under anarchy, even at the expense of peace (Morgenthau 1948:8), this meant that the possibility of merging multiple states 'into a single center of authority must certainly be regarded as very remote' (Niebuhr 2011:172). Even though the given arrangement was admittedly suboptimal compared to a united world community, '[w]e may live for *quite a long time* in a period of history in which a potential world community, failing to become actual, will give rise to global, rather than limited, conditions of international anarchy and in which the technics of civilization will be used to aggravate the fury of conflict' (Niebuhr 2011:162 emphasis added). Relatively balanced relations between sovereign states were the best possible outcome, so realists tended to subordinate moral claims and ideals to political contingencies, even if most acknowledged the inescapable importance of moral judgment (Niebuhr 2001:4, 231–33).

Discordant change

The advent of atomic warfare in 1945 and the subsequent thermonuclear revolution in the 1950s undercut core realist principles. In the academy, however, a consensus was slow to develop due to mixed reactions and ready conclusions based on familiar narratives about how politics worked. Some scholars appreciated the bomb's import quite readily. Herz (1950:157) called the combination of nuclear and bipolar conditions a 'heartbreaking plight'. For Morgenthau (1950:304), the successful Soviet test of an atomic bomb marked a 'decisive change in the world balance of power' and 'the shattering of the foundations upon which American foreign policy has been built' (Morgenthau 1950:307). He thus despaired that US governmental reaction to the test displayed '"no glimmering of a new or original thought … everyone is just as he was before—only more so"' (Morgenthau 1950:307).

By contrast, Niebuhr was relatively unfazed at first. He initially appraised the bomb as a 'turning point', an important but intelligible moment in a long-running story about power

politics rather than any instance of utter discord. Although the bomb implied 'mutual annihilation' and thus 'the end of one age and the beginning of another in more than one sense', Niebuhr still found it familiar as the '"logical" climax of saturation bombing' (quoted in Craig 2003:79–80). And because the new age was different but not entirely distinct from the old, the bomb *elevated* rather than *destabilised* the perennial dilemmas and tragic elements of politics under anarchy (Craig 2003:80). Even the successful Soviet test was not as daunting to him as to Morgenthau because it added 'new levels of "moral perplexity"' to political calculations but signalled no fundamental change (Craig 2003:80). Niebuhr therefore initially advocated the continued development of nuclear weapons and their limited use under certain circumstances. However, he might have heeded his own reflection, formulated near the end of WWII, that 'realists are usually so impressed by the power of … perennial forces that they fail to recognize the novel and unique elements in a revolutionary world situation. … The realists erroneously discount the destructive, as well as the creative, power of a revolutionary situation' (Niebuhr 2011:176).

Despite their declared disquiet, Morgenthau and Herz joined Niebuhr's return to realist principles to grapple with atomic discordance. Although he would soon give as clear an exposition of the thermonuclear *revolution* as anyone, Herz initially understood the US and Soviet detonations as merely 'the extreme manifestation of a [security] dilemma with which human societies have had to grapple since the dawn of history' (Herz 1950:157). And for all Morgenthau's insistences that 'we need a new foreign policy, based upon new assumptions', his recommendations were fairly staid: a recalculation of the balance of power and 'frantic' American rearmament (quoted in Craig 2003:70). Niebuhr's reaction largely confirmed the status quo because he did not recognise much discordance in the bomb. Morgenthau and Herz did, but to a limited degree, and this allowed them to return to extant narratives.

However, further technological developments soon vitiated any attempts to inscribe the new age within a familiar story, and this realisation produced significant anxiety. Between 1952 and 1953, the US and the USSR tested thermonuclear devices exponentially more powerful than atomic bombs. Once there were mounted on intercontinental missiles capable of breath-taking delivery speeds a full-blown revolution was underway that rendered most extant understandings untenable.[13]

To Herz (1959:12–13, 22), intercontinental missiles were 'truly revolutionary' and sounded the death knell of political authority founded on the 'hard shell' of territorial protec-

[13] But not all—in a singular and pseudonymous response, Ferreus (1954:402) insisted that bipolarity still trumped technological developments.

tion. As the realisation dawned that his earlier recalibration of the security dilemma had lost salience, Herz became quite anxious. Likening the bipolar, nuclear age to two scorpions in a bottle, Herz (1959:14) deplored that 'the most striking immediate effect of the "new"' was the 'impression of a situation which defies rational approaches' and spelled 'doom' because it had 'somehow become unmanageable' and measureless. Although he occasionally wondered whether he was over-impressed with the 'newness of the new age', Herz (1959:18 emphasis added, see also 20-21) ultimately could not shake the spectre of novelty: '"One thing that is new is the *prevalence* of newness, the changing scale and scope of change itself, so that the *world alters as we walk in it*"'. Such discordance 'stagger[ed] the imagination' and caused 'a lag in consciousness and awareness of what the new situation entails and what the new trends necessitate', even as it demanded 'peculiar new thinking' (Herz 1959:35, 25–26, 30, also 167). The problem was not just in judgment or practice but in theory as well: 'international politics, not only in its actualities but also in its concepts and terminologies, is confused, and … present-day man in the world exists as in a maze' (Herz 1959:223).[14] For example, in the face of nuclear novelty, power—a central pillar of political realism—'lost its unequivocal meaning and effect', for '[n]ow that power can destroy power from center to center *everything is different*' (Herz 1959:32, 108). Consequently, the 'traditional means of achieving national security and protecting national interests are no longer available' (Herz 1959:20–21).[15]

Morgenthau's reaction paralleled Herz. The incomprehensibility of thermonuclear warfare reduced 'to absurd clichés the noble words of yesterday' but was itself so absurd as to defy rational speculation (Morgenthau 1961:234). In light of this, Morgenthau (1961:234, see 1950:307) feared that the status quo would persist for lack of viable alternatives: 'It would indeed be the height of thoughtless optimism to assume that something so absurd as a nuclear war cannot happen because it is so absurd'. He thus realised that thermonuclear discordance signalled a repudiation of his extant vision of international politics.

Even Niebuhr could not withstand thermonuclear change. In 1957 he acknowledged that it had 'made many of our conclusions otiose', including classical realism's stance on limited warfare, nuclear weapons as a fact of international life, and the perennial effects of international anarchy as a relatively stable starting point for political theorising (quoted in Craig 2003:85, see also 91). Niebuhr (2011:176) had initially discounted the destructive power of

[14] At issue was not just potential solutions to the revolution but also the status of IR's foundational concepts, which required an audit to assess whether they remained 'applicable and at what points they must be reevaluated in the light of changed conditions' (Herz 1959:11).

[15] Here Herz echoed George Kennan, who in 1954 observed that the postwar situation evinced 'a sort of schizophrenia. … We found ourselves living in two different worlds … In one of these worlds the old traditional concepts still applied; in the other, there was only the law of the jungle' (quoted in Herz 1959:26 n27).

the atomic bomb, but the utter discord of the thermonuclear missile left him 'philosophically afloat' (Craig 2003:92, 86).

Scholarly reaction: the problem of Time

More specifically, the discordant emergence of thermonuclear technology left realists afloat in the river of Time, and it was flood season.[16] In the midst of the emerging arms race, Niebuhr (2008:3) agonised that the 'recalcitrant forces in the historical drama have a power and persistence beyond our reckoning.' In a pre-nuclear world he had been relatively confident that humanity could survive 'for quite a long time' under an international anarchy punctuated by furious conflicts (Niebuhr 2011:162), but in a thermonuclear world, the correlation between passing Time and chronic warfare was no longer tenable. In both, absent an overarching government 'anarchy invariably overcomes [its] management *in the end*', and thus every 'potential anarchy' becomes 'actual anarchy *in the long run*' (Niebuhr 2011:173–74). But in a thermonuclear world anarchy and conflict now threatened a global apocalypse, and the very passing of Time itself served to shorten the 'long run' and bring 'in the end' ever closer while peeling off its preposition. The problem was not just political, it was also theoretical due the disparity between 'yesterday's anticipations and today's realities' and the fact that the 'pace of history in our era is so swift that only the most agile can adjust their imagination to the rapidly changing scene' (Niebuhr 1956:81; quoted in Herz 1959:18n16). This left Niebuhr (2008:144) in a bind, since in addition to acknowledging that the current flow of Time was overwhelming thought he also believed it 'grievously wrong either to bow to "waves of the future" or to yield to inertias of the past'.

Herz echoed this lament. The current 'unpredictability of discoveries and similar events which have been and still are following each other in such dizzyingly swift sequence' were such that 'the mind—and, consequently, policy planning—cannot keep pace' (Herz 1959:18). At minimum, this threatened to render his thinking irrelevant before it could even be published (Herz 1959:170). At most, thermonuclear technology introduced a 'decisive change … from "distinctness" and "separateness" to "pervasion" … so that the power of everyone is *present* everywhere *simultaneously*' (Herz 1959:168–69 emphasis added). In short, the '"essential change"' posed by thermonuclear weapons was to '"concentrate the violence *in terms of time*"' (Herz 1959:20 quoting Brodie, emphasis added). Herz (1959:26n28) feared

[16] It is worth noting that in 1944 Niebuhr (2011:84) referred only to the 'flux of time' or to 'flux in time' but by 1952 was explicitly acknowledging the 'vicissitudes and hazards of time' (see Niebuhr 2008:85).

that an adequate response thus required '"an apocalyptic imagination which we do not possess"'.

For Morgenthau (1948:4), the bomb merely exemplified an intrinsic, and intrinsically temporal, difficulty of international politics, which is that observers are always 'surrounded by the contemporary scene with its ever shifting emphasis and changing perspectives' and therefore 'cannot find solid ground on which to stand, nor objective standards of evaluation'. However, the thermonuclear revolution added an element of 'heroic resignation' to this difficulty: '"Every year if not every day we wager our salvation upon some prophecy based upon imperfect knowledge"' (Morgenthau 1967:viii). Perhaps as a result, Morgenthau's work in this period shifted toward a search for 'deep meaning rather than policy defect' and employed a more 'anguished, lyrical style' at odds with the confident prose of his earlier writings (Craig 2003:114). In particular, he engaged the tension between thermonuclear missiles, death, and Time most explicitly:

> the nuclear age has changed man's relations to himself. It has done so by giving death a new meaning. Death is the great scandal in the experience of man; for death—as destruction of the human person after a finite span of time—is the very negation of all man experiences as specifically human in his existence: the consciousness of himself and of his world, the remembrance of things past and the anticipation of things to come, a creativeness in thought and action which aspires to, and approximates, the eternal (Morgenthau 1961:231).

Morgenthau (1961:231) highlighted three ways that 'man' might overcome death: 'by making himself, within narrow limits, the master of death; by denying the reality of death through the belief in the immortality of his person; by conquering the reality of death through the immortality of the world he leaves behind'. But because thermonuclear warfare could *utterly negate everything*—humans and their creations alike—with little to no warning, the meanings of death, immortality, and life were all radically altered. Instead of the various possibilities of individualised and/or heroic deaths, of societal and historical achievements, and of durable physical constructs, the thermonuclear revolution 'destroys the meaning of death by depriving it of its individuality. It destroys the meaning of immortality by making both society and history impossible. It destroys the meaning of life by throwing life back upon itself' (Morgenthau 1961:233). To Morgenthau, the only thing not radically altered by thermonuclear discord was the problematic flow of Time itself, which had instead 'returned' in prototypical form with the emergence of weapons that turned every passing moment into the potential beginning of a very swift end.

Morgenthau (1961:231–32) focused on the contrast between thermonuclear weapons and what is 'specifically human' in existence: the ability to remember, experience, and anticipate; or to configure the past, present, and future as an imaginative unity. He also emphasised how nuclear weapons denied humanity's potential to transcend its intrinsic finitude through thought, action, and labour, all of which serve to 'approximate eternity'. Finally, he insisted that thermonuclear weapons rendered 'history impossible' and eviscerated all extant systems of meaning. It is no wonder that the problem of Time featured so prominently at this point, for Morgenthau understood that the temporal objectives of constituting a past, present, and future; of transcending finitude; and of relying on extant narratives of how the world works had been thrown into radical doubt.

Narrative rectification?

The return of the problem of Time in thermonuclear weapons engendered a need to rectify current narratives (see Craig 2003:73, 86). Although the implications of the new technology beggared the imagination, scholars *must* develop a response, for the 'refusal to adapt thought and action to radically new conditions has spelled the doom of men and civilizations before [and] is likely to do so again' (Morgenthau 1961:234). Thus, in the late 1950s and 1960s classical realists responded to this critical situation with 'agonizing', uncertain, and even contradictory revisions aimed at finding a theoretically consistent way to oppose thermonuclear proliferation (Herz 1959:5, 168; Craig 2003:xiv).

Herz (1959:168) was unsure whether theory could survive, for 'so radical is the new departure, so bewildering the continuing rate of change that one is inclined to question whether any meaningful framework of concepts relating to any coherent power system and to any consistent foreign policy can be built up at this point'. However, because this observation granted theory a key role in the story of human survival, he was invigorated rather than enervated: 'In the field of international politics, where events now govern the very basis of everything else … studying facts, explanations, and solutions is no longer mere "philosophizing" but an essential part of that "life" which is at stake' (Herz 1959:3). In the face of discordant change, theory served the crucial function of uncovering the underlying causes of events so as to explain what makes 'policy "tick"' (Herz 1959:4). It is telling that when reconnoitring theory in the face of Time's problematic flow, Herz hoped to return some semblance of clock-like certainty to international politics.

Morgenthau also focused on revising a theory that had reached its limit.[17] Like Herz, he found that the prospect of nuclear apocalypse both terrifying and invigorating. If thermonuclear war vitiated the very meaning of human life and death, then to discover how to reliably avoid it would mark a transcendent achievement against finitude and the problem of Time—'not only an intellectual and moral but a political triumph as well. For it would indicate that at least the mind of man has succeeded in mastering that blind and potent monster which in the name of God or history is poised for universal destruction' (Morgenthau 1962:61).

Niebuhr fared worse. Foundering in a 'cloud of uncertainty', he claimed that the revolution 'raised the moral ambiguity of the political order to the nth degree' (quoted in Craig 2003:88)—an acknowledgement that thermonuclear novelty approached the limit condition of sheer, debilitating novelty. He seized on the 'eschatological dimension' in this void of intelligibility, a sense that 'all our judgments are made under the shadow of the final judgment' (quoted in Craig 2003:88). Deeply unsettled by a combination of fear and anxiety, almost a decade after the first thermonuclear test Niebuhr (quoted in Craig 2003:88) still enjoyed little recourse but to a politically impoverished form of hope: 'May the Lord have mercy on our souls'. Thanks to thermonuclear discordance, warfare had mutated from a realist policy instrument into a symbol of the 'end times'.

Whether invigorated or enfeebled by the spectre of nuclear apocalypse, realist revisions coalesced around a world state. This was anathema to certain of their theoretical foundations such as the primacy of the sovereign state and the perennial importance of anarchy and power. Faced with annihilation, realists were willing to try and work around the dissonance.

Herz (1959:302–08) proffered that the bomb was an 'attitude-maker' that would convince publics and elites to submit to a global monopoly of nuclear power. He also proposed a sustained 'holding operation' that would stabilise international politics and allow for further inquiry into a more permanent solution to thermonuclear anarchy, even if it entailed a more universalist or 'realist liberal' approach (Herz 1959:244–297). Niebuhr surmised that a world state was necessary because thermonuclear war was 'an unambiguous evil that transcended the relative immoralities and proximate justice of collective politics' (Craig 2003:112). Raising awareness of this should enable a global humanity to emerge via natural human reactions

[17] Additionally, he 'began to turn away from strategic writing altogether' (Craig 2003:105), in part due to the realisation that misunderstanding nuclear novelty had allowed him to make policy recommendations at odds with the new necessities of the era.

to the spectre of mortality, which would finally make the passing of nation-states palatable because they were replaced by a more durable world state (Craig 2003:vii, 109). If plausible, Herz's and Niebuhr's arrangements would have transformed thermonuclear novelty into a positive turning point that drove the story of international politics toward the necessary conclusion of a world state—an excellent example of concordant discordance. However, neither could produce a satisfactory theoretical account that connected the perilous fact of the bomb to the promising fiction of world government.

Morgenthau also re-thought key points of realism. In his first edition of *Politics among Nations* (Morgenthau 1948:8), 'the preservation of peace' was a 'prime concern of all nations' surpassed only by 'the most elemental considerations of national existence and security'. By the fourth edition, Morgenthau (1967:22) had removed the sovereignty and security trumps altogether—'the preservation of peace' was 'the prime concern of all nations', full stop. This shift held important implications for a world state. In 1948, faced with 'the prospects of a third [world war] to be fought under the *modern conditions* of warfare, the *propaganda* for a world state has reached broad masses and has imparted to them a *peculiar* sense of urgency' (Morgenthau 1948:391 emphasis added). By 1967, warfare was specified more precisely and the possibility a world state treated much more favourably: 'the prospects of a third [world war] to be fought with *nuclear weapons* have imparted to the *idea* of a world state an *unprecedented* urgency' (Morgenthau 1967:483 emphasis added).[18]

Yet this shift also caused some of Morgenthau's 'most inconsistent, even muddled, thinking' (Craig 2003:98), including the simultaneous assertion of a diplomatic thaw alongside recommendations for a more confrontational stance on the part of the US toward the USSR and a chronic return to limited nuclear war as a policy tool. The latter recommendation became particularly problematic once it was clear to Morgenthau that a limited nuclear exchange depended upon rational political elites on both sides who would consider surrender—with all its concomitant costs—while retaining decisive arsenals. Limited thermonuclear war effectively required political leaders to sacrifice the welfare and perhaps even the sovereignty of their state for the sake of humanity. In the process of trying to integrate and coordinate thermonuclear novelty with both his extant theory and with ongoing policy questions, Morgenthau had to argue against himself that 'scientific man could overcome power politics' (Craig 2003:101), which was something he could not accept.

[18] For a similar shift, see (Schuman 1933, 1946, 1952).

The world state remained little more than a fuzzy ideal for IR realists because they never developed a plausible account of how a global leviathan could emerge from existing conditions. Perhaps this was due to the scholars' advancing age or ongoing problems in Cold War foreign policy (see Craig 2003:132, 2013:9), but it was also because the nearly sheer novelty of thermonuclear weapons hamstrung their *ability to theorise*. In the form of thermonuclear discord, the problem of Time returned upon their extant theories to such a degree that they could not successfully rectify narratives about how the world worked in a way that would render intelligible and practical knowledge about the most pressing issue of the era. Unable to re-emplot thermonuclear weapons, Herz, Niebuhr, and Morgenthau hinted at a political solution but never posed it as the conclusion of a theoretically plausible plot.

The emergence of thermonuclear novelty produced a critical situation of intellectual upheaval in which realist scholars confronted the problem of Time and lost.[19] Monumental efforts were then required to accommodate thermonuclear weapons in theory, including a more positivistic and structural presentation of realism that sought scientific explanations of anarchic, nuclear *stability* (Waltz 1979; Nobel 1995; see Craig 2003:117–65). Theorists laboured doggedly to integrate and coordinate theory with international experience because this was vital to the field's intellectual viability. A social science intimately linked to practical dilemmas but unable to advise on or explain them risks losing relevance as political actors (and funding bodies) look elsewhere for intelligible and enactable stories to assist them on the stage of international politics.

The End of the Cold War

Extant narrative

Despite relative ebbs and flows over 40 years, the 'single critical issue' of 'overriding salience' for most scholars of international relations was a bipolar structure that pitted the US and the USSR against each other in superpower rivalry (Ferguson and Mansbach 1988:104). It was generally assumed that this structure was a 'permanent feature of international relations' (Deudney and Ikenberry 1992:124; Lebow and Risse-Kappen 1995b:1). It was considered highly unlikely, even unimaginable, that one of the two superpowers would encounter

[19] See (Holsti 1998:18) for an argument that the 'core of the field did not change, although perhaps the sense of urgency and insecurity wrought by the possibility of nuclear annihilation was more profound than had been the case in other eras.' Although I concur with him on the sense of urgency and insecurity in IR's 'era of anxiety', if the core of the field looked quite similar four decades later it was due to monumental efforts to integrate and coordinate thermonuclear novelty in a coherent account of international politics by significantly altering theory. Just as running in place is not the same as being at rest, continuity is not identical with the absence of change.

significant domestic instability or otherwise 'fail to play its balancing role' during the balance of the 20th century, so most IR scholar expected the 'basic framework' of the international system to remain largely intact (Gilpin 1981:237, 235).

On the remote chance that bipolarity did pass, this would likely 'trigger' a global conflict (Gilpin 1981:235; see Lebow and Risse-Kappen 1995b:1). Especially in the case that either the US or USSR experienced domestic upheaval, the 'fear of ultimate decline and the perceived erosion of power' would leave the system extremely vulnerable to an outbreak of nuclear-inflected violence (Gilpin 1981:239 cf. 234-37). Such a story was inductively plausible, since 'episodes of rapid international change appeared to be associated historically with war, and empires rarely accepted their decline with graceful resignation' (Wohlforth 1994:104). Even so, '[m]ajor international change and precipitous Soviet decline seemed remote enough that writers felt it sufficient to note in passing that analogous events in the past had usually been accompanied by large-scale violence' (Wohlforth 1994:104). Such historical correlation between war and major change left many scholars intellectually ill-equipped for the changes beginning in 1989.

Additionally, by 1989 much of IR had come under the grips of metanarratives of scientific progress and propriety imported from philosophers' analytic reconstructions of natural scientific triumphs (see Gunnell 1975, 2011). Whereas the academic field of IR was nascent at best in 1919, and the methodological revolution just beginning to flower in the 1950s, by the end of the 1980s IR had become thoroughly professionalised according to external standards of 'good science'. A crucial part of this standard was a record of successful predictions. This meant that when bipolarity passed with a whimper rather than a bang, it marked a triple threat based on two sets of extant narratives: substantive theories of the stability of bipolarity and the correlate of structural change and violence, and social scientific metanarratives of scientific 'progress' based largely on the gold standard of prediction.[20]

Discordant change

Compared with scholars' expectations, the 1980s were a 'decade of astonishing structural and strategic change' (Doran 1991:155) that culminated in the sudden collapse of the Berlin Wall in 1989 and the USSR in 1991. Both shook the foundations of the post-WWII international order 'to their foundations' (Kirkpatrick 1989:1). William Wohlforth (1994:91) announced his surprise thus: 'Now, the US-Soviet antagonism is history. Suddenly, unexpectedly, and

[20] On the 'triple challenge' of the end of the Cold War, see (Halliday 1995:38–39).

with hardly a shot fired in anger Russian power has been withdrawn from the Elbe to the Eurasian steppe'.

Yet despite an obvious preference for the end of totalitarian Communism and peaceful international change, many scholars remained uncomfortable with such a sudden and unprecedented development. One reason was that '[h]istory contains no precedent for so striking an example of abrupt but amicable collapse' as that of the Cold War and the USSR (Gaddis 1992:51–52). Another was that the change introduced greater complexity to international affairs. It quickly became 'difficult to discern the plot of this unfolding drama because three or four plays are being performed on the same stage at the same time' (Deudney and Ikenberry 1991:249). To illustrate just how discordant the peaceful passing of bipolarity was, Ted Hopf (1993:207) posed the following counterfactual:

> Can anyone imagine a senior international relations scholar applying to the Carnegie Endowment in 1972 for a research grant to investigate the conditions under which Moscow would most likely voluntarily relinquish control over Eastern Europe? … investigating how the Cold War might end, or how the Soviet Union might dissolve, would not be part of the daily concerns of a researcher at the Correlates of War Project, or a regime theorist, or a formal modeller, or a political psychologist.

In addition to Hopf's list, neither neorealists, neoliberals, nor most foreign policy analysts were overly concerned with such change (Lebow and Risse-Kappen 1995b:1), so the vast majority of the field was ill-prepared for the events of 1989-91.[21] This tinged an ostensibly happy event with an element of disaster, and it was not unusual to treat the end of the Cold War as 'the third great *cataclysm* of the twentieth century' (Halliday 1995:40 emphasis added).

Scholarly reaction: the problem of Time

In their reactions to the discordant end of the Cold War, IR scholars evoked the problem of Time.[22] Charles Kegley (1993:141) admitted shortly after that IR seemed to be 'constantly

[21] Foreign policy journals had discussed just such possibilities for at least two years prior to 1989 (e.g. Rostow 1987; Ullman 1988), although this did not entail any more optimism than in the academy. Rather, the '21st century promises to be worse' than the twentieth and beset by 'a new *flow* of difficult' albeit 'hopefully more benign' problems (Rostow 1987:840, 847).

[22] In some instances, they used approximate language, which might seem to weaken the argument, except that my interest in this chapter is in whether the *structure* or *practice* of 'doing IR theory' recapitulates that posited by the narrative theory of action in Part I. Given that the problem of Time is as venerable as any facet of ordinary language it is not necessary for me to demonstrate that contemporary scholars *consciously invoked and reflected upon* the problem of Time, it is only necessary to show that their scholarly actions were narrativised and oriented against (i.e. *evocative* of) Time as a problem to be solved (see pp. 92-93).

surprised by events'. Anne Deighton (1996:92) noted that 'some international relations scholar have run for cover' because they were 'caught out … by the capacity of history to surprise'. And Robert Jervis (1991:39) observed that '[h]istory usually makes a mockery of our hopes or our expectations. The events of 1989, perhaps more welcomed than those of any year since 1945, were unforeseen.' This made it 'clear that we are entering a new world' (Jervis 1991:39), and many scholars viewed this as auguring conflict rather than harmony.

Others turned to fluvial metaphors for the problem of Time. First came domestic instability in the USSR, where things 'swung from extreme rigidity to extreme fluidity' (Calvocoressi 1990:672). Then, 'with the abatement of the Cold War and the dissolution of bipolarity the flux of international politics is back' (Calvocoressi 1990:674). For John Mearsheimer (1990:16), the end of the Cold War meant the return of multipolarity, under which 'the shape of the international order tends to remain fluid' and 'international "rules of the road" … tend to *change constantly*'. '[F]luid politics' would follow and produce foreign policy 'miscalculation' and an elevated probability of conflict (Mearsheimer 1990:36, 39). The historian John Lewis Gaddis (1991:116) took the fluvial metaphor furthest: 'now that the Cold War is over, geopolitical glaciers are retreating, the situation is becoming fluid once again, and certain familiar features of the European landscape … are once more coming into view. The critical question for the future stability of Europe is the extent to which the Cold War glacier permanently altered the terrain it covered for so long.' Glaciers are frigid and implacable, but at least, he seemed to suggest, they are stable and have the added benefit of obscuring the disquieting aspects of (mostly welcome) changes.

Having confronted the return of the problem of Time, scholars yearn for stability and permanence in no uncertain terms. In the midst of the collapse, Stephen van Evera (1990:52 emphasis added) dramatically recommended that 'the West should seek a settlement that will *stand the test of time.* A settlement that does not last is *worse than none at all*, since it provides *no benefits* and its breakdown will sow bitterness and suspicion'. Mearsheimer (1990:9 emphasis added), who seemed less perturbed by the change than most, still argued that 'social science *should* offer predictions on the occurrence of momentous and *fluid* events like those now unfolding in Europe' so as to properly re-situate theory in relation to discordant events. Yet even then, '*Time will reveal* whether these theories in fact have much power to explain international politics' (Mearsheimer 1990:10 emphasis added). In the surprising end of the Cold War, IR theorists recognised that the problem of Time had returned upon extant narratives of international politics.

Narrative rectification

The end of the Cold War made it seem that '"reality falls through the interstices of the theories"' and this prompted '"political scientists to ask why their generalizations fail when they are confronted with something new"' (Kegley 1993:133, 141; Halliday 1995:57; Fawn and Larkins 1996b:1). For many, it also indicated that a 'new theorization of international relations may … be needed' (Halliday 1995:58). Furthermore, due to the influence of social science metanarratives, scholars also had to reflect on the implications of the discordant change for IR as a discipline. Much more so than WWI or the thermonuclear revolution, IR scholars in the 1980s were triangulating between three different continua—the end of the Cold War, their substantive account of international politics, and a story about how social science works.[23] I cover the substantive accounts first before turning to metatheoretical reflections.

Neorealists were quite quick to re-emplot the end of the Cold War. As mentioned, Mearsheimer (1990:17; also Walt 1991:226) announced a return to multipolarity, which was more uncertain and therefore less stable than the bipolar Cold War environment. The world without a strong Soviet Union would allow for new powers to rise, turning formerly simple calculations complex and threatening violent miscues. All of this promised to validate neorealists' principles, since '[i]f the Cold War is truly behind us, the stability of the past 45 years is not likely to be seen again in the coming decades' (Mearsheimer 1990:56).

Alternative narratives came from scholars who did not view bipolarity as a clear-cut correlate of peaceful coexistence or neorealism as the prevailing theoretical orientation. Gaddis (1992:44) interpreted the event as the sudden outcome of a 'long-term historical process'—like an earthquake that signals 'subterranean phenomena' at work. Kegley (1993:132–33) apprehended a 'neo-idealist moment' for international politics that might finally mark the 'end of history'. Christopher Coker (1992) concluded that since the advent of nuclear weapons had rendered war incapable of providing a source of meaning, the post-Cold War era was an important step toward war's obsolescence. Others speculated similarly that the international system might finally be 'primed for peace' (van Evera 1990; Kegley and Raymond 1992; see Holsti 1998:19). And John O'Neal and Bruce Russett (1997) discovered that democratic peace proponents had been right all along about the positive connections between trade, democracy, and peace. Although they did not claim to account for the end of the Cold

[23] Hutchings (2008:87–103) also covers this episode in the context of a comparison between prophecy, prediction, and science.

War,[24] they concluded that the spread of liberal-democratic principles during the Cold War had contributed to a more peaceful world capped off by the amicable dissolution of bipolarity. For others still, the 'most fundamental issue' at this point was 'the unfinished business inherited from the Cold War' itself, namely 'the formation of an international society … characterized by a broad sharing of political and social values' (Halliday 1995:59; also Fawn and Larkins 1996a). On this interpretation, the sudden passing of bipolarity was but 'one episode in the evolution of [international society]' that signalled 'a challenge to fulfil an *old* agenda, amid an international context beset by *new* dangers and tensions' (Halliday 1995:59 emphasis added). All of these efforts served to render the surprising passing of bipolarity more intelligible by casting it as part of an ongoing trend or as a decisive turning point in a comprehensible narrative. This effectively lent concord to an initially discordant event by integrating and coordinating it against a given synoptic theme.

In addition to these substantive concerns, scholars confronted a metatheoretical question. By 1989 American IR was an established sub-field of political science, replete with an intellectual identity informed by Kuhnian (1962), Lakatosian (1980), or hybrid metanarratives about successful scientific action.[25] Thus theorists not only sought ways to inscribe the end of the Cold War in revised theories, they also reflected on what such revisions suggested about the role of the field in an ongoing scientific epic.

These efforts marked a disciplinary trend that 'resurfaces whenever we are astonished by events in the domain we seek to understand: science should learn from surprise' (Wohlforth 1998:651). It was impelled in part by the stinging critiques that scholars levelled at each other. Gaddis gleefully compared IR theory unfavourably with 'soothsayers' who relied on 'the configurations of stars, the entrails of animals, and most indicators in between' (Gaddis 1992:5). In his judgment, 'for all the good our "scientific" methods did; clearly our theories were not up to the task of anticipating the most significant event in world politics since the end of World War II' (Gaddis 1992:18).[26] Neorealism came in for special criticism as 'inadequate' (Kegley 1993:133; Kratochwil 1993; Koslowski and Kratochwil 1994; Lebow,

[24] Russett already had attempted as much in an article with Ray (1996:463 emphasis added; cf. Hutchings 2008:96): 'it is unfair to argue that the absence of predictions about the end of the Cold War by advocates of the democratic peace proposition demonstrates their (or their theory's) inadequacies. It is more important that democratic peace theory *could* generate probabilistic forecasts about the Cold War' before its end'.

[25] For Kuhnian, see (Truman 1965; Almond 1966; Jervis 1968; Lijphart 1974); for Lakatosian, (Bueno de Mesquita 1985:123; Kratochwil and Ruggie 1986:754; Simowitz and Price 1986; Dessler 1989:447); for hybrid, (Vasquez 1979, 1982; Krasner 1985); for a comparison, (Dryzek 1986).

[26] This particular line of attack has turned up again in an ongoing American academic debate about the 'scientific' (read: predictive) status of political science and National Science Foundation funding (see Chenoweth and Lyall 2012; Farrell 2012; Gutting 2012; Lane 2012; Nexon 2012; P.M. 2012; Stevens 2012; Ulfelder 2012a).

Mueller, and Wohlforth 1995; Lebow and Risse-Kappen 1995a; and to a lesser extent Deudney and Ikenberry 1991), although neorealists themselves emphasised the broader embarrassment of IR as a social science (see Lebow et al. 1995:187). Mearsheimer (1990:9) admitted that IR did not yet resemble a hard science given its stock of 'spotty' and 'often poorly tested' theories. For him, the extant impossibility of 'precise political predictions' and the intrinsic inaccuracy of 'all political forecasting' marked IR's and neorealism's greatest shortcoming (Mearsheimer 1990:9).

Confronting such anxiety about their intellectual bona fides, scholars moved quickly to restore IR's place in the metanarrative. The end of the Cold War provided an instructive 'reality check' in the forms of renewed 'focus, provided by an unexpected event of seminal importance; competition, generated by a lively contest between established theories; and data, reflected in a recent outpouring of fascinating new information' (Wohlforth 1998:651). James Ray and Russett (1996:467) happily noted that one outcome of competition was that despite being ignored for much of the Cold War, a combination of rational choice and comparative analysis now had a chance to demonstrate that 'political events in general are on the way to becoming more predictable'. Deudney and Ikenberry (1991:244) welcomed the 'irreducibly plural' and 'conjunctural' qualities of the end of the Cold War because these proved that 'no one theory can explain the causes and consequences of these contemporary events—no one key fits all the locks.' However, in light of the multiple 'plays' being performed 'on the same stage at the same time', they also recognised it would eventually be necessary to settle on the single plot that rendered events most intelligible (Deudney and Ikenberry 1991:249).

For Kegley (1994:20–26) IR's failure to anticipate the end of the Cold War was occasion for a full methods refresher. His 'autopsy' exposed a body of scholarship guilty of bad habits, so correcting them and emphasising a few specific methods over others were the keys to arriving at an ever-better understanding of the particular event and more generally to reinvigorating the field (Kegley 1994:31). All of these recommendations shared the general moral of rectifying how theory was done in light of a critical situation brought about by a discordant experience.

Gaddis' lesson for IR theorists deserves special attention. He argued that in their quest for scientific legitimacy, IR scholars had forgotten that international politics posed 'a range of phenomena extending from the determinate to the indeterminate—from predictable clocks to unpredictable clouds' (Gaddis 1992:27). They had embraced natural and physical sciences methods too tightly, and just when the hard sciences were de-emphasising determinacy, regularity, and predictability (Gaddis 1992:54). Most notably, the end of the Cold War exposed

how structural IR theories ignored 'time' by treating it as an empty 'dimension—like length, width, and depth—but not as a process. Structuralists see time as a scale against which to measure events, but they pay little attention to the fact that *the passage of time, in and of itself, also shapes events*' (Gaddis 1992:38 emphasis added). This left structure unable to account for change, and suggested that a fundamental revision of the understanding of 'time' was necessary to rescue structuralism. Although he seemed to view this as a new turn for IR theory, what Gaddis was proposing was a *return* to the more venerable and figural vision of 'time' as the 'bringer' of events into IR theory. Although his interlocutors were not as explicit, they implied as much in their scholarly discourse, which frequently evoked the idea of Time as the bringer of wreck and ruin to the stable international system.

Neorealists, on the other hand, concluded that little to no revision was necessary. Alternative proposals produced a 'proliferation of explananda', including 'the timing of some or all events' and 'the rapidity of events', and such 'subtle differences in explanatory focus [would] prevent theories from competing on the same ground' (Wohlforth 1998:674). In light of a discordant event that recalled the problem of Time, the answer was *not* to add explicitly temporalized factors to the story because this would simply infect IR with the same instability afflicting its objects of analysis. This was the last thing IR needed, since the 'difficulty of conceptually and empirically separating structure from units is especially evident when power relations are in a *state of flux*' (Wohlforth 1994:126 emphasis added). Instead, the situation called for redoubled creative filtration and concordant discordance 'to *isolate* those factors that are likely to be the *driving forces* of history' (Hoffmann, Keohane, and Mearsheimer 1990:199 emphasis added).

The reason that more of the same trumped something new was that the failure to anticipate the end of the Cold War *could not* invalidate neorealism. There was an emerging consensus that Soviet domestic reforms precipitated the collapse (e.g. Deudney and Ikenberry 1992:123), and neorealists seized on this as proof that since they dealt only with *systemic* causes, the end of the Cold War was outside their purview. Measured against a systemic theme:

> it is not even clear that the end of the Cold War is an *appropriate* event for "testing" neo-realism, insofar as key elements of the case lie *outside* the domain of the theory. … Put differently, realism simply *does not say very much* about how a state will behave when it is coming apart at the seams … [Thus] criticizing realism for failing to anticipate the collapse of the Soviet Union is a bit like chiding it for failing to explain the Great Depression, the behavior of sub-atomic particles, or the causes of cancer (Walt 1997a:475 emphasis added; see also Wohlforth

1994:93).

Those who embraced nomothetic theorising additionally insisted that even *if* relevant, a single aberrant case such as the Cold War could never disconfirm a theory about general patterns of behaviour (Walt 1997b:934, 1997a; cf. Wohlforth 1994:91–92). Taken together, these moves amounted to the double insulation of neorealism. The end of the Cold War was creatively filtered as irrelevant to both its substantive narratives and to its social scientific metanarrative. Because of the influence of domestic factors the Cold War was inappropriate for testing systemic stories; because it was merely a single data point it was insufficient for evaluating a nomothetic plot (see Lebow and Risse-Kappen 1995c:ix).[27] Several years later, Wohlforth pushed a step further. He concluded that IR's initial *reaction* to the end of the Cold War should be discounted: 'As the sense of astonishment at the unexpected events of 1989-91 fades, so too does the commonsensical appeal of the contention that they have special importance for theory. Methodological arguments that might have seemed petulant in 1991 now appear prudent' (Wohlforth 1998:655).

Yet, there is significant difference between a theory *not* being invalidated by the end of the Cold War and its being validated and requiring no revision.[28] And despite claims that the end of the Cold War was 'quite consistent with realism' and therefore not a 'critical case', (Wohlforth 1994:126, 125), neorealists *did* expend energy defending themselves and 'updating' theory because of it (see Wohlforth 1998).[29] Wohlforth (1994:92) himself acknowledged that neorealists could not just 'carry on as if there are no lessons in this series of events for international relations theory in general and realist theories in particular'. Indeed, the change exposed neorealist theories as 'terribly weak', elevated only in relief against other theories, nowhere near 'the ideal of scientific theory', and too indeterminate in their retrospective explanations 'specific episodes of change' (Wohlforth 1994:127, 129, 1998:651, 679; see also Hoffmann et al. 1990:199). Neorealists were eager to highlight significant diversity within their approach, and in this case they were right: within neorealism the end of the Cold War was at once irrelevant and an indictment of neorealism as a scientific theory, inadequate to

[27] Critics retorted that this simply exploited an 'inbuilt silence' in neorealism that substituted 'canonical repetition' and 'apparent' rigour for laborious reflection, with the result that neorealism retreated to the 'most theoretically comfortable' conclusion that 'the events of the past few years … have made, and should make, no difference at all' (Halliday 1995:40, 39).

[28] Such an argument also ignored the effect of creative filtration on the debate in the intervening years. Given their influential position in IR at the time, it is certainly possible that by immediately filtering the event as irrelevant, neorealists pushed the end of the Cold War toward the margins even as they endeavoured to 'save' neorealism from an event that purportedly posed no threat (Wohlforth 1994:128).

[29] Although 'update' prefigures a step-wise change rather than any fundamental revisions. Walt (1998:35) referred more obliquely to 'new wrinkles' to neorealism.

destabilise neorealist generalisations but also a good reason to update theory and operationalise concepts differently. Neorealists did revise in response to the end of the Cold War; they just emplotted this as a series of minor adjustments or, better yet, significant progressions in theory. Even in a sympathetic reading in which these updates helped general theory 'descend' to the level where a single empirical episode can be scientifically explained, it is hard to shake the sense that a shocking event destabilised neorealists' systemic narratives about international politics; that they responded to this within the constraints of a nomothetic, social scientific metanarrative; and that the goal was to reduce the 'fluid' quality communicated from discordant event to theory by 'anchoring' that event within a rectified account.

A ready objection to the earlier examples of Time's influence on IR theorists is that both WWI and thermonuclear weapons were by any standard appalling, so anxious reactions and theoretical rectifications had more to do with normative valuations than plain discord. The end of the Cold War undercuts such scepticism. Given that no one in IR welcomes the prospect of general war and/or thermonuclear cataclysm, the passing of the Cold War with few violent and no nuclear exchanges represented a generally positive outcome. Yet even though it concerned a much more welcome development, this episode aroused anxiety and impelled rectifications no less than WWI and the thermonuclear revolution. It was not whether or not the end of the Cold War was good or bad that moved IR scholars to action within a metanarrative about how to do good social science; it was that the event plainly reminded them that '[s]urprise is still very much with us' (Gaddis 1992:5).

Conclusion

This chapter examined three discordant international political developments in order to inquire whether IR manifests the relationship between narrative and the problem of Time developed in Part I. It found that across a disciplinarily significant historical period, regardless of their normative valuation, and despite the development of IR theory as a self-conscious academic subfield, emergences on the international political stage begat emergencies for the academic discourse of international relations. In each case, scholars called for efforts to emplot or re-emplot the discordant event and worked hard to do so. They also evoked the problem of Time as an exogenous force whose fluvial nature 'brought' grievous events within their vocational ambit. We might even say that theorists acted much like other humans: when threatened by discordant change, they were fearful, anxious, and sought to ensure their survival—they just did so by narrative timing in the form of sociopolitical theorising instead of explicit action.

These moments in IR's disciplinary record recapitulate the narrative theory of action. The scholarly community of IR constituted itself through efforts to restore the coherence of core narratives—both of how international politics work and of how the social science of IR progresses—in the face of discordant changes widely associated with Time's flow. Insofar as IR theories are change continua that result from the integration and coordination of international political changes with thematic ideas about how the world works, this record also recalls the basic paradox of timing and 'time', in that the problem of Time 'returned' to IR whenever theorists' ability to time international politics—to integrate and coordinate events with their extant models—faltered. However, this discussion only treated IR in crisis. I focused exclusively on scholars' reactions to surprising events, which by definition defy easy timing. It remains to be seen whether IR theory recapitulates the paradoxical relationship between narrative timing and the problem of Time when not confronting crisis—that is, in sober methodological recommendations made and theoretical outputs produced under more tranquil conditions.

4

Worlds enough, and less time: Narrative reasoning about a Time-bound world

[I]nternational affairs are hard to reduce to intellectual order, perhaps because they are changing character even as one tries.

– Martin Hollis and Steve Smith[1]

Had we but world enough, and time
this coyness, Lady, were no crime

– Andrew Marvell, ca. 1651[2]

Introduction

The previous chapter argued that in some of the most important moments of its disciplinary history, IR recapitulated a relationship between narrative, action, and the problem of Time. When discordant international political events disrupted an extant account of how the world works, scholars became anxious about the problem of Time and work to emplot those events in a rectified theoretical narrative. However, given the importance of discordance to timing concerns and the problem of Time, it may seem as if I selected too freely on the dependent variable. My argument will be more convincing if I can show that IR theorists mobilise narrative timing resources and lament the problem of Time even when *not* in the midst of critical situations. So it is necessary to investigate the ways in which the relationship between narrative timing and the problem of Time manifests in IR's more composed and rigorous reflections about *how* to make sense of the world, and in *what* sorts of theoretical outputs it produces.

This chapter and the next treat the 'how' and the 'what', respectively. Recall from Part I that inasmuch as they synthesise ideas with empirical information in a coherent account that facilitates action, theories instantiate the Janus-faced activity of *narrative timing*. *Inter-*

[1] (Hollis and Smith 1991:88).
[2] (Marvell 2005).

nally, they result from the integration and coordination of multiple change continua with one continuum (the central theme) acting as a standard of coordination; *externally* this product provides a means of integrating and coordinating humans with their world. To respect the dynamic nature of this timing project I need to investigate how IR scholars propose to develop theories before examining the actual accounts produced. Therefore, in this chapter I delve into neopositivist, critical realist, and interpretivist methodologies. I am not concerned with a comprehensive review of the methodological stances in question.[3] Rather, I aim to show that they interpret the propensity for discordant changes in international political phenomena as evidence that international politics is 'Time-bound' in the sense that it is inextricably linked to the problem of Time, that their methodological prescriptions include certain narrative timing devices, and that they seek to replace the problematic totality of Time with narrative temporality. In other words, this chapter concerns the process by which IR scholars reason from puzzling phenomena toward an intelligible account of them and argues that this process relies on narrative techniques to transform parts of the discordant realm of international politics into components of an enactable, inhabitable story.

I begin with a brief discussion of the timing and 'time' aspects of the scientific laboratory because it acts as an iconic metaphor for much social science methodology. Whether they seek to analogise or mimic it as completely as possible or refuse its strictures, social science methodologies are largely defined and evaluated against the ideal of the scientific laboratory. This sets the stage for the analyses that follow, which do not look for *substantive* explanations of particular phenomena but for generalised or formalised recommendations about how to develop substantive accounts that comport with a particular vision or metanarrative of social science.[4] The order of presentation tracks from most opposed to Time's flow to least, and from least openly narrativistic to most. After a brief summary of the methodology, I cover four points. First, proponents of the methodology in question evoke the *problem of Time* in their appraisals of social life. Second, in response to this, they compose a general story about a world more inhabitable to social science as they understand it.[5] Third, this general story

[3] For these, see (Gunnell 1975; Steinmetz 2005; Wight 2006; Kurki 2007; Jackson 2011) on neopositivism; (Gunnell 2011; Jackson 2011; Suganami 2013) on critical realism; and (Hollis and Smith 1991; Keohane 1988; Patomäki and Wight 2000) for certain aspects of interpretivism. This chapter also should not be confused with a psychoanalytic conjecture that theorists develop methodological recipes to reduce their anxiety in the face of Time's flow. Although this is an intriguing avenue for inquiry, I am currently only conducting a textual analysis.

[4] This chapter does not concern the temporal features of particular explanatory accounts of political phenomena, which are treated in the following chapter.

[5] Recall that inhabitability is one of the features of the temporality that a narrative propounds as an alternative to the problem of Time; the other is an intelligible, unfolding sequence (see pp. 71).

provides a thematic standard for assessing what sorts of change continua can be included in individual, substantive accounts. Finally, this thematic standard delimits the ways of reasoning from the empirical realm to an explanation by setting the terms for the narrative timing devices of *synoptic judgment* and *creative filtration*. To adapt one of this chapter's epigraphs, from the English poet, Andrew Marvell, I argue that each methodology understands the task of making sense of the Time-bound world of international politics as dependent on analysts' ability to configure 'worlds enough', but with '*less* Time'. In other words, IR's primary methodologies direct us to make sense of political phenomena using narratives, each of which features far fewer change continua than the phenomena themselves. I conclude the chapter by discussing what this analysis indicates about each methodology *as a timing project* in its own right, and by iterating the *spectrum of timing and 'times'* from Part I with specific reference to IR methodologies.

This chapter serves as a bridge between the narrative theory of action in IR (chapter three) and a structural analysis of forms of IR explanation (chapter five). By focusing on *ways* of reasoning, I elaborate out the mediating process between IR scholars' vocational self-understanding and their experiences of the world of international politics, on the one hand, and their actual outputs, on the other.[6] I make use of some of the narrative timing devices and ideas about narrative temporality developed in chapter two. In terms of methodology and method, the relevant aspect of narrative temporality is that, regardless of what particular, *intelligible sequence* they *unfold*, viable theoretical accounts must propound worlds *inhabitable* to social scientists and political actors. Consequently, the methodologically salient narrative timing devices are synoptic judgment and creative filtration because they beget standards of inhabitability for various forms of explanations and help separate relevant from irrelevant information.[7] Of course, every narrative has a synoptic theme of some sort, which provides the standard by which its various elements are organised into a coherent account, so in chapter five I return to synoptic judgment. The key difference is that in this chapter I treat *general thematics* that establish standards of viability for the *particular themes* of individual narratives. Within a given methodology, the thematic standard formalises ideas about the situations on which social science can gain traction and in which human action can work, which

[6] This fits the vision of nested narratives developed in part one, in which actors act within narratives of certain situations and metanarratives about what it means to do whatever they do and be whoever they are, have experiences that challenge both situational narratives and metanarratives, and revise both in an effort to restore coherence to their vision of the world, their ability to act in it, and their self-identity.

[7] Although filtering and cleaving are closely related, we cannot decide where to 'break' a change continuum and thereby begin or end the story until we have isolated that continuum as relevant, and others as not. Furthermore, the breaks pertain to the specific synoptic theme, while questions if ir/relevance are more general and tied to overarching thematics.

helps direct ways of reasoning from the 'blooming, buzzing confusion' of international politics to a scientifically acceptable account.[8]

Scientific laboratories, 'closed' spaces, and the Time-bound international system

Initially, I was unaware that time, so boundless at first blush, was a prison.

— Vladimir Nabokov[9]

Before examining the primary IR methodologies, it is important to note the overall influence and underexposed temporal implications of an iconic metaphor for the social sciences, the scientific laboratory. Whether as a gold standard or a methodological straight jacket that must be rejected, IR's pursuit of knowledge resounds against the ideal of an experimental laboratory, an invention of modern natural and physical sciences in which many laws of nature were discovered and verified. The laboratory poses an alternative to natural observation, which provides prolific empirical data but tends to interfere with efforts to isolate factors and test propositions. To prevent such interference, laboratories restrict access and carefully control all manner of stimuli, thus reducing the interaction of natural change continua by the '"violence of impediments"' (Merchant 2008). Another way of putting this is that the laboratory is closed inasmuch as it is 'isolated' from external inconsistencies and possesses no internal inconsistencies (Bhaskar 2008:74). The laboratory is therefore understood as a 'controlled space' or a 'closed system', as opposed to natural or social realms, which are uncontrolled and 'open' (see Shapin and Schaffer 2011:39; Bhaskar 2008:63–142).[10]

Whereas the closed laboratory offers researchers an 'environment free of *unexpected* or unexplained variables', open systems contain numerous and inconsistent elements 'capable of acting in an *unexpected* manner', not least humans themselves, and are therefore in a '*chaotic flux*' that manifests neither constant conjunctions nor regular sequences of events (Judd 2003:23 emphasis added; Bhaskar 2008:33). International politics exemplifies just such an open system, 'lying exposed to influences deriving from the other systems in which it is embedded. From them *flows a constant stream* of events and influences that shape the condi-

[8] This well-used phrase is from William James (2007:488; see Wolin 2004:368; Mearsheimer and Walt 2013:431).

[9] (Nabokov 1989:20).

[10] During the scientific revolution, many hoped to identify the social realm with the experimental laboratory (Choi 2007; see Guggenheim 2012). The vacuum, in which no sources of interference are allowed to inhibit or interfere with whatever process the experimenter induces, and which facilitated advances in our knowledge of mass, sound, respiration, and the behaviour of gases, exemplifies a closed space.

tions under which the members of the system must act' (Easton 1965:18; Tetlock and Belkin 1996b:38; George and Bennett 2004:152).

That these distinctions draw on the fluvial metaphor and one of Time's pernicious cronies, chaos, suggests that open and closed spaces have something to do with the problem of Time. The laboratory is a physical space constructed to prevent external interference in causal processes, and its successful constraint of variation and surprise is what sets it apart from the 'open' world. Inasmuch as interference and surprise are forms of discordant change, we can say that the closed space of the laboratory supports clean and successful *timing*, or the integration and coordination of those change continua selected by the researcher without any imposition by other continua. The primary benefit of such a setting is that within its confines a given cause *always* produces a given effect, and the presence of that effect *always* indicates that the same cause occurred (Bhaskar 2008:73). In the usual, paradoxical way of thinking about 'time', this means that the laboratory is *unbound* by the problem of Time. This comes through in descriptions of the laboratory experiment as producing results that are 'invariant *to* … time' (Bhaskar 2008:91).[11]

By contrast, the larger social and natural worlds remain 'Time-bound' because they are beset by complexity, inconsistency, and the unexpected. These worlds' 'openness' is another way of pointing to the fact that they remain under Time's dominion—it is really the 'open' horizons of Time that menace research in the sense that at any new moment discordant changes may disrupt hitherto unconditional sequences, add variation, or introduce an element of contingency to otherwise determinate scientific procedures.[12] So to say that international politics is an open system is also to indicate—more or less explicitly—that it is Time-bound.

This is a lamentable situation for IR scholars committed to a 'naturalistic' or 'unified' scientific approach (Moses and Knutsen 2012). For them, 'true experiments … remain the gold standard' (Lake 2011:474–75), followed by quasi-experiments (which do not assign cases randomly), and then statistical correlational designs (which establish probability of co-variance).[13] But experimental opportunities are exceedingly rare, and perhaps impossible, in

[11] Bhaskar (2008:73, 91 emphasis added) also writes that closed systems are actually always 'time-bound', but here refers to the very colloquial and Western standard sense that they do not endure indefinitely (i.e. they have durational limits), which in turn is why he also writes that their results are not 'invariant *over* time'.

[12] In this way the laboratory ideal reproduces the longstanding distinction between the problem of Time and the promise of eternity: in the laboratory, knowledge advances to the extent that the researcher can achieve a modicum of eternity in the form of stable control of some change continua 'freed' from Time's overwhelming flow.

[13] Laboratory experimentation also supports the 'modern' identity of political science *as* a science (Palfrey 1991a). Lately, the rise of artificial intelligence, which allows 'complete control of every aspect of the

international politics. However, this does not keep the laboratory metaphor from becoming deadly literal at times, as when scholars glean data from 'the great laboratory' of history in pursuit of 'a coherent body of *timeless* propositions' (Kaplan 1962:3), or use 'the world … as a laboratory to decide which theories best explain international politics' (Mearsheimer 1990:9). Even scholars less enamored of the laboratory as an ideal still prefer situations that approximate it more closely than less, since it is not generally considered good for IR to be '"in as much a state of change, chaos, and confusion as the contemporary world scene which it seeks to comprehend"' (Lijphart 1974:41). Short of literalising the metaphor, they settle for a variety of puristic stories about international politics that substitute tidy *narrative temporalities*, which effectively 'close' down the situation they describe by removing or marginalising many sources of interference from the plot, in place of the empirical phenomena, which remain 'open' to the vicissitudes of Time. Therefore, a major theme that runs through this chapter and much of the rest of the project is that inasmuch as it strives for a certain standard of scientific viability, IR has to *tame* the problem of Time by disciplining surprise, unpredictability, and change with methods inspired by the experimental laboratory—the ideal, closed system in which to accomplish successful timing.

Neopositivism: tall tales for a quasi-Timeless science

Flowing from Humeanism, logical positivism, and empiricism (Hempel 1965; Popper 2002; Reichenbach 1971; cf. Gunnell 1975), neopositivism is the 'father house of IR theory' (Neumann 2011:xiv; Long, Maliniak, Peterson, and Tierney 2012). It is based on a story of scientific progress in which scholar use empirical observations to test hypotheses deductively derived from general theories (Young 1972:180). Neopositivists also want to develop reliable generalisations about conjunctions or correlations between political phenomena because these hold the potential to anticipate outcomes in the future when conditions match those of the generalisation, and even to produce the accurate predictions that make IR scientifically viable (Young 1972:179).

Neopositivism confronts the problem of Time

Neopositivism displays the hallmarks of basic timing. The task of establishing a correlation presumes two or more continua of change, since the 'variables' X and Y change but also display enough continuity to remain identifiable as 'X' and 'Y'. And it requires intellectual syn-

situation, including the problem-solving methods used by the simulated actors' (Schrodt 2004:99), poses a platinum standard..

thesis to integrate and coordinate those change continua at a higher level of generality measured by the reliability of their correlation. Finally, this synthesis is intended to orient researchers and actors in the realm of politics and to enable effective action.

As with any timing effort, neopositivist social science grapples with discordant change, which either opposes the persistent correlation between variables, threatens the coherence of the variables themselves, or arrives in such profusion as to confound rigorous reasoning. As we have seen, the problematic features of timing often become the problem of Time. We can find claims of this hidden in plain sight in Gary King, Robert Keohane, and Sidney Verba's (1994 henceforth KKV) touchstone methods guide, *Designing Social Inquiry*. KKV (1994:79) are primarily concerned with the 'fundamental problem of causal inference'.[14] Because 'a certain degree of randomness or unpredictability is inherent in politics, as in all of social life', because 'the social world changes rapidly', and because 'every aspect of social reality is infinitely complex',[15] 'no matter how perfect the research design, no matter how much data we collect, no matter how perceptive the observers, no matter how diligent the research assistants, and no matter how much experimental control we have, we will never know a causal inference *for certain*' (King et al. 1994:55, 6, 42, 79 emphasis added). Against this, the procedure of scientific inference based in empirical correlation offers the best hope of moving from Time-bound phenomena to a reliable knowledge claim.

Neopositivism's inhabitable narrative: hypothetical laboratory

For neopositivists, inference is the key action in a scientific narrative with two features. The first is that although social scientific knowledge is 'always uncertain', it remains 'possible to have some knowledge of the external world' (King et al. 1994:6)—that the phenomena of the 'real world' are amenable to scientific study and that the knowledge produced by such study can be used to intervene successfully in that world. As we will see in the following treatments of critical realism and interpretivism, this is a common feature. The second is more peculiar to neopositivism. Inasmuch as they believe in the unity of science, neopositivists propose that the social sciences should adhere to the standards of natural science as closely as possible. There the experimental laboratory is the ideal environment in which to conduct research, a strictly controlled stage where the story of scientific progress is successfully enacted because

[14] Additionally, finite human intellects 'engage in the *imperfect* application of theoretical standards of inference to *inherently imperfect* research designs and empirical data' (King, Keohane, and Verba 1994:7 emphasis added).

[15] Complexity and change are sometimes called 'background variation' (Lake 2009:52).

discordant changes cannot interfere with the experiment and thus cloud conclusions about the connections between phenomena.

The two key features of the neopositivist narrative combine in an important way. First, although the logical positivist roots of neopositivism recommend agnosticism about whether *correlations* in data announce real *causal* connections,[16] it is difficult to remain faithfully agnostic in a story that holds up 'real world facts' as the optimal conclusion of scientific action. For KKV (1994:8, 75 emphasis added; cf. Jackson 2011:156) what makes inference scientific is that it moves '*beyond* the immediate data *to something broader* that is not directly observed' using inferential techniques that, when successful, give researchers confidence that they have arrived at more 'satisfying' and 'complete' claims about *causal* relations. Second, neopositivists confront a gap between the laboratory ideal and their phenomena of interest, which typically cannot be controlled in a 'closed' experimental space free from the vicissitudes of Time (Bennett 2004:36; Moses and Knutsen 2012:68). Some try to approximate such conditions as closely as possible, for example through foreign policy and crisis simulations (King et al. 1994:24), or when the exceedingly rare cross-case comparison offers 'the functional equivalent of a controlled experiment' (Bennett 2004:40; cf. George and Bennett 2004:152).[17] But for the overwhelming majority of socio-political questions, this is not possible. So to reason toward reliable knowledge about the real world, neopositivists must *construct* a *hypothetical* laboratory environment in which to test propositions (Collier, Seawright, and Munck 2010:38). If science is characterised by a single form of inquiry, then phenomena must be brought into the laboratory one way or another. But what can occur literally in the natural sciences must occur in the social sciences *narrativistically*—by telling idealised stories about situations that are more lab-like and therefore more amenable to generalisation and causal inference than the phenomenal situation they address.[18]

In this vision of social science, inferential *techniques* trump substantive *puzzles*: 'The content is the method. … we can use these methods to study virtually anything' (King et al. 1994:9, 3). This claim proffers a *single standard* for integrating, coordinating, and ultimately controlling change continua regardless of their particular features. That is to say, KKV are propounding a *timing metre*, a standardised frame of reference applicable across a wide range

[16] We can envision three levels: covariation within a data set; covariation in the universe of which the data set is a sample; and a causal connection that manifests in the universe and in this sample as covariation. Faithful neopositivists are exceedingly wary about moving beyond the second level (see Jackson 2011:41–71).

[17] Other areas of political inquiry submit more readily to laboratory conditions, such as voter behavior or committee decision making (see Palfrey 1991b).

[18] Although KKV (1994:218n7) also note that even natural scientific experiments in effect analyse only 'partial derivatives' of 'complex phenomena of reality in their entirety.'

of situations—indeed across virtually any and every aspect of social life.[19] However, although they aver that the content is the method, KKV are actually employing a methodological standard to delimit the contents of legitimate social science research. As will become clear, we cannot actually use this standard 'to study virtually anything'. In fact, it is just the reverse: we can use their metre to study *anything virtually*, for in an open system only things interpretively *rendered* amenable to experimental control can reside within an inhabitable story about properly scientific study under laboratory conditions.

Thematic standard: experimental control

Because they are delimited by a laboratory experimental ideal unattainable in most social scientific research designs (King et al. 1994:199), neopositivists pursue theoretical inferences through hypothetical stories united by the idea of *experimental control*. This thematic delimits what sorts of elements can be included within a hypothetical laboratory. Regardless of the actual puzzle addressed, what identifies a research design as neopositivist is that the aim is to control for all 'possibly confounding effects' so that we may study whether, '*all else held constant*, a change in X leads to a change in Y' (Lake 2009:52).

Two examples of model inference in KKV are instructive.[20] First, in an analysis of electoral success, the causal effect of incumbency is 'the difference in the systematic component of the vote in this district with an incumbent in this election and without an incumbent *in the same election, time, and district*' (King et al. 1994:90 emphasis added). Of course, it is impossible to empirically observe two elections identical in every way except for the factor of incumbency (King et al. 1994:79). What we can do is observe the singular event at the specific time and place, and then '*imagine that we go back in time* to the start off the election campaign *and everything remains the same,* except that the Democratic incumbent decides not to run for re-election and the Democratic Party nominates another candidate (presumably the winner of the primary election)' (King et al. 1994:77–78 emphasis added, see also 88-89).

Second, when analysing the impact of prison on the radicalisation of beliefs, '[t]he Fundamental Problem is that we can observe this person's beliefs in only one of these situations. *Obviously, the same individual cannot be in and out of prison at the same time* (King et al. 1994:200 emphasis added). It is also that '*we cannot rerun history* at the same time and the same place with different values of our explanatory variable each time' (King et al.

[19] It also suggests a hope that the social world is basically inhabitable because we can locate within the total flow of Time some regular causal ligatures that offer anchor points for building up reliable, enactable knowledge.

[20] For a very concise, abstract model of inference, see (Odell 2004:60).

1994:91 emphasis added). Now it is true that the potential number of observable cases of prison radicalisation (i.e. large-N) is much larger than that of electoral incumbency (small-N), so it is more feasible to approximate a truly experimental design through 'explicit controls' such as random sampling or matching highly similar individuals who differ only on the variable of incarceration (King et al. 1994:200). But these techniques are still a poor substitute since they cannot guarantee that matching persons will be found or that 'all plausibly confounding variables' have been 'controlled' (King et al. 1994:201) The ideal remains a discrete case analysed in a comprehensively controlled laboratory:

> Ideally, we would like to take a single individual, wait a year under carefully controlled conditions that maintained his environment identically, except for the passage of time and events in the outside world, and measure the radicalness of his political beliefs. Simultaneously, we would take the individual at the same time, send him to prison for a year, and measure the radicalness of *his* political beliefs (King et al. 1994:200).

With regard to Time and narrative thematics, three points about KKV's examples are worth mentioning here. First, although they of course realise that these examples cannot be actualised, they employ them not only in the sense of 'if only we could …' but also as guides to reasoning. Though we cannot *enact* these ideals, the message seems to be, we should *think* as if we could. KKV appear convinced that literal impossibilities are our best bet for getting a better grip on the social world and understanding how to intervene in it successfully.

Second, are KKV really saying that time travel is crucial to valid inference? Although they make no effort to specify what they mean by 'time', I think the answer is yes under our understanding of 'time' and timing. The inability to 'rerun history' or 'go back in time' does not refer to the idea that we cannot reset a clock or manipulate a calendrical date; it indicates the difficulty in *timing* phenomena in an open social system.[21] In a closed laboratory we can 're-run' an experiment with near perfect symmetry because the quantity and complexity of the change continua are drastically reduced from those found in the open, Time-bound world. In such a situation, it is relatively easy to iterate a temporal sequence to check its conditionality, variance, and reliability. For example, we can effectively 're-run time' in each trial of an experiment on gravitational force if the vacuum allows no outside interference and the massive object dropped inside it is unaffected by the impact of its fall and remains internally con-

[21] It may be argued that this is also due to the irreversibility of causal processes or the generally entropic nature of the world (Carroll 2010:26–43), although it remains to be seen whether entropy produces 'time' or is a consequence of timing.

sistent, since under these conditions we can replicate the relevant change continua exactly.[22] In an open system, by contrast, we cannot isolate continua so stringently, and in social systems the objects of research are, in any case, internally inconsistent (see Bhaskar 2008:74). In those situations it is impossible to reproduce a temporal sequence with the level of similarity required for reliable inference. In KKV's examples, contexts pertinent to the experiment would have changed (e.g. results of all the other contests on the ballot, prison populations), voters, politicians, and inmates would still recall the previous 'trial' of the experiment and might have changed their minds for no identifiable reason, everyone would have aged and some died, to name just a few. In other words, the pertinent continua of change are numerous and would have changed in such numerous and interacting ways that it would be impossible to integrate and coordinate them *exactly* as they had been in the previous trial, with the exception of the one variable in question. The 'time' in which the election and prison examples occur is irreversible because *too much timing* is required—the many ways in which all their pertinent change continua interact to produce a specific sequence of events confounds *comprehensive* integration, coordination, and replication.

As a consequence of this, and third, in both the prison and election examples, KKV must rely on narrative configurations in which the thematic standard of experimental control sets the terms for how inference must proceed. The power of the laboratory narrative is so powerful that when faced with phenomena that cannot be brought into the laboratory, neopositivists openly propose to *imagine* either the simultaneous occurrence of two processes utterly identical but for one salient factor or time travel. KKV (1994:77–84) often call this a 'hypothetical' procedure but this is not so if by 'hypothetical' they refer to hypotheses amenable to empirical testing, since the reason for such imaginative 'thought experiments' is that researchers realise that actual experiments are impossible. It is more properly 'counterfactual', which KKV (e.g. 1994:77–78) also use, but in a *fictive*[23] rather than hypothetical sense—when it comes to sociopolitical phenomena, it is *only* in fictive configurations that a limited number of reliably coordinated continua of change exist free from the intrusion of discordant developments or the overwhelming quantity of information associated with the problem of Time. In conflating 'hypothetical' and 'counterfactual', neopositivists elide the fictive benefit

[22] Although we do not actually turn back the Western standard clock between trials, we do replicate the relationship between the relevant change continua with such precision that the advance of Western Standard 'time' matters not except as a measure of duration that allows us to compute velocity. Friedrichs and Kratochwil (2009:713n51) also identify 're-running time' with an identical iteration of events.

[23] By 'fictive' I mean 'imaginary' rather than 'feigned'; see (Fictive, Adj. 2012; on the difference between fictional and factual see Shotter 1994:181n13). All representations are minimally fictive, since even people attempting to represent 'reality' rely on 'imaginary creations, as no two observers are likely to share exactly the same schemas even if they share numerous common experiences' (Lebow 2010:278).

of counterfactual thinking, which is to provide a means to attain 'otherwise unattainable perspectives on our world' by 'taking ourselves outside of our world' (Lebow 2010:17, 5); or to pursue flights of the 'rational imagination', including 'impossibilities that could never happen' (Byrne 2007:1, 10).[24]

Furthermore, when pursuing the laboratory ideal, the *more fiction the better*. Researchers must imagine 'replicating' the fictive experiment as many times as feasible, both to test the reliability of the hypothetical relationship and to weigh it against others (King et al. 1994:84). Inasmuch as every story propounds a universe of its own, each of these replications adds to a fictive *multi*-verse—a multitude of narrated *uni*verses, each differing by precisely one salient variable (Collier et al. 2010:38).[25] Such fictive reverie is necessary to lever sociopolitical phenomena into the controlled environment of the experimental lab. Because it is impossible to actually rerun sociopolitical processes with only one factor altered, neopositivists imagine a multitude of these impossible processes in order to produce theoretical results akin to experimental ones (George and Bennett 2004:138).

Although they would perhaps deny it, when neopositivists derive methodological recommendations from a thematic of experimental control they bring scientific inference quite close to a social constructionist emphasis on language.[26] The power of neopositivist inference is of a narrative and linguistic sort in that it rests on the ability of researchers 'to create whole fictional realities that, although we know them to be impossible …, give us a sufficient sense of reality' (Shotter 1994:93). It is no exaggeration then to conclude that in order to learn facts about the real world, neopositivists propose to reason by *configuring numerous fictive narratives* informed by the common thematic of experimental control*, over which the problem of Time and its associated threat to scientific inference have little influence.*[27]

Creative filtration: autonomous and systematic

The overarching neopositivist thematic of experimental control clashes with actual sociopolitical phenomena, which rarely submit to control of any sort. Additionally, since both actual and fictive experimentation depends on a rigorous comparison of the outcomes associated

[24] For a critique of neopositivists' use of counterfactuals, see (Lebow 2010:281); for a distinction between neopositivist and Weberian counterfactuals, (Jackson 2011:149).

[25] Collier, et al.'s (2010:38) exact wording is that this sort of inference 'hypothetically posits the existence of *two parallel universes*, exactly alike in every way except one', but once this comparison is replicated, universes proliferate.

[26] 'Constructionist' refers to the more general theoretical movement rather than IR's distinctive constructi*vist* approach (see Jackson 2011:161).

[27] 'When *time travelling* with the fictive dream the key is to make the prose *natural*' (Whitehall 2011 emphasis added).

with each variable of interest, the numerous and complex variables implicated in any sociopolitical puzzle entails that a great deal of the puzzle must be excised to produce a manageable quantity of variables. In actual experiments, it is the controlled space of the lab that accomplishes this. In neopositivist narratives, it is creative filtration. In both situations, the connection between excision and the problem of Time is evident: the fewer variables considered, the fewer continua requiring coordination, the fewer discordant changes confronted in timing, and concomitantly the problem of Time recedes.

Creative filtration is evident when neopositivists admit that they must filter out 'many obviously varying features' of the world in order to 'isolate and study' a single phenomenon of interest (Lake 2009:52). Of course, all social sciences make this bargain to some extent. Neopositivists, however, employ a particularly rigorous rubric dictated by the experimental control thematic. This can be seen in strictures intended to render phenomena as discrete and autonomous variables or classes of variables and to categorise these as either systematic or random.

Sociopolitical phenomena are typically of such complexity and nuance that, prior to any causal analysis, to do them descriptive justice almost always risks subordinating generality to idiography. For example, no two wars are the same on a countless number of factors, and this renders scientific inference impossible. Therefore, neopositivists recommend reducing the numerous and fuzzy processes implicated in international conflicts into discrete, autonomous events called 'wars' and grouping these into classes to facilitate their comparison as variables (King et al. 1994:10). From the vast collection of political violence that saturates the historical record, they can then extract events that include 1,000 battle deaths between organised armed forces representing two or more sovereign states in a calendar year, and constitute these as 'interstate wars' (see Small and Singer 1982:205–06). Similarly, the fundamental unit of analysis in IR, the sovereign state, usually functions unproblematically in neopositivist analyses as a discrete agent or data point instead of a territorialised complex of interconnected institutions, ideas, polities, and personalities. Such instrumental objectification is a 'useful fiction' (Wendt 2004:290) that creatively filters out much of the fluid, complex, and interconnected world of international politics so as to make inferential storytelling more feasible.

Neopositivists take creative filtration a step further, subdividing already-objectified variables into systematic and random classes (see King et al. 1994:81). We often refer to the surprising events that emerge in Time as random, chance, or coincidental occurrences to mark their deviation from 'normal' experience. Neopositivism formalises this quarantine by

seeking methods that 'help guard against chance' (Sprinz and Wolinsky-Nahmias 2004c:10). In particular, '*one of the fundamental goals of inference*' is to distinguish 'random' from 'systematic' variables and then to further filter random variables as either systematic or non-systematic (King et al. 1994:56, 81–82). 'Systematic' refers to constant or mechanistically consistent aspects that affect outcomes over a large number of instances and are thus 'fundamental and predictable characteristics' (King et al. 1994:56). 'Random' indicates transient features or events that are 'by definition not persistent' and so are considered unlikely to affect outcomes across multiple cases (King et al. 1994:62). 'Non-systematic' similarly refers to 'one-offs' or 'transitory' and inconsistent aspects and effects, which are unpredictable and thought to obtain only in particular instances (King et al. 1994:56, 62). Under the standard of experimental control, systematic features include stable belief systems and institutions, many economic and material factors, or anything that can be predicted ahead of its occurrence.[28] On the other side, agents, accidents, and confluences are non-systematic (see Lebow 2010:19).[29] We can think of systematic, autonomous variables as changes highly amenable to coordination and control because they are consistent, persistent, or otherwise stable—these are changes that we can manipulate to affect outcomes, so gaining knowledge about them helps to orient action. By contrast, random and non-systematic variables are changes that cause extant coordination to 'slip', but not in any way that allows us to collect such instances together and generalise about them. In other words, random and non-systematic variables are changes that cannot be transformed into a new *continuum* of change,[30] cannot be integrated, and thus confound the neopositivist timing project.[31]

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There is nothing necessarily objectionable about the proposal for making sense of the world of politics proffered by neopositivists like KKV. However, they are either confused or disingenuous when they insist that their putatively unified framework for *any* scientific social in-

[28] This link is spurious, however, since even with modest knowledge, we can also predict unique and otherwise 'random' events ahead of time (Singer 1989:13); and although neopositivists might claim otherwise (e.g. Ray 2009:138), regular connections between events is not a *necessary* condition of accurate prediction.

[29] Analysing voting behaviour, KKV (1994:56, 62) list ideological differences, income, campaign organisation, and party support as systematic. Non-systematic variables include terrorist incidents, instances of police brutality, and influenza outbreaks, all of which are quite pertinent to contemporary international politics (e.g. Hoffmann 2006; Löwenheim 2009; Hayward-Jones 2013; Ülgen 2013; Kittelsen 2012).

[30] A subset of random or non-systematic changes is 'historic discontinuities', which invalidate a theory and leave neopositivists 'adrift' (Gilpin 1981:212).

[31] For a full-throated defence of this approach, see (Young 1972:196).

quiry is distinct from narrative. In addition to propping open a breezy gap between social scientific theory and humanistic narrative, this detracts from neopositivists' own narrative innovation. This methodology undertakes an ingenious interpretive effort to transform the 'open' phenomena of politics into something like the 'closed system' of the experimental laboratory through causal inference, which is itself a regimented form of storytelling. Under the thematic of experimental control, causal inference creatively filters out many of the most discordant changes in social life that are also hallmarks of the problem of Time. By drastically reducing the amount of change continua considered scientifically relevant and then configuring as many fictive accounts as possible of how the remaining continua might interact, neopositivist inference replaces the totality of Time (all the change continua that might impact upon a phenomenon) with a purified narrative temporality amenable to experimental control. To be clear, it is precisely the accumulation of stories about alternate universes in which Time is held in check that provides inferential and therefore scientific currency here. Neopositivism's self-understood viability as a social scientific methodology thus hinges on the use of narrative mechanisms to vigorously tame the problem of Time. The heart of rigorous, mainstream social science reconciles existence in Time using simplistic and tall tales of quasi-Timeless worlds.[32]

Critical realism: the quasi-eternal theology of social science

Deep-hidden is he under that strange Garment [of Senses]; amid Sounds and Colours and Forms, as it were, swathed-in, and in-extricably over-shrouded: yet it is skywoven, and worthy of a God. Stands he not thereby in the centre of Immensities, in the conflux of Eternities? He feels; power has been given him to know, to believe …

– Thomas Carlyle[33]

Since emerging in cognate disciplines (Archer 1995:e.g.; Bhaskar 2008; Chakravartty 2010; Dean, Joseph, Roberts, and Wight 2006c; Judd 2003), critical realism has begun to flourish in IR (e.g. Wendt 1999; Patomäki and Wight 2000; Wight 2006; Kurki 2007; Wight and Joseph 2010).[34] Avowedly pluralist about the objects and methods of political inquiry (Wight 2006:248), the central contention of IR critical realists is that all political problems 'must be

[32] Recall that calling something that includes *any* change 'timeless' is incoherent and a performative contradiction. 'Quasi-Timeless' then indicates the reduction but not the eradication of change continua.

[33] (Carlyle 2008:51).

[34] Critical realism has also received a peculiar disciplinary seal of approval—an extended dalliance with neopositivism (see Wendt 1999; George and Bennett 2004)—although this liaison raises some eyebrows (Gunnell 2011; Jackson 2011).

addressed at the level of ontology' (Wight 2006:4). Before scientists assess whether a claim is warranted or determine the best course of action on its basis, they must provide answers to the question of what the world *really* consists, for successful action depends on engaging what is actually there to be engaged. This entails a strong claim about how social scientists should treat the many unobservable entities or processes that they use to make sense of observable phenomena. Instead of treating references to unobservables as either instrumental statements whose primary purpose is to help explanations cohere or as provisional placeholders in the development of knowledge, critical realists assert that we can believe in unobservables depending on their importance to an explanation about how some observed phenomenon was produced (see Jackson 2011:79–81; Gunnell 1975). Where conjectured objects are shown to affect the empirical world, they 'must be taken to be real, to *actually* exist' (Wight 2006:31–32; Jackson 2011:84).[35]

Critical realism confronts the problem of Time

In their efforts to develop knowledge about unobservable entities and to justify why these should be treated as real, critical realists join neopositivists in working toward an intellectual synthesis of information, although critical realists tend to refer to such entities as 'deeper' ontological structures rather than 'higher' overarching laws. But regardless of the direction, the intent is to depart the 'surface' of human experience and to integrate and coordinate various change continua in an account that provides reliable knowledge for purposes of orientation and successful action. That is, critical realists seek *to time* experiential phenomena by synthesising them with unobservable entities.

Despite this basic similarity, critical realists view the ideal of laboratory control as a something of a red herring for social scientists. As a seminal critical realist, Roy Bhaskar (2008:33), notes, the rationale for a controlled experiment is that it identifies a causal law that 'prevail[s] outside' the laboratory. This is because causal laws are unchanging properties 'endure and continue to operate in their normal way under conditions, which may be characterized as "*open*", where no constant conjunction or regular sequence of events is forthcoming' (Bhaskar 2008:33; Patomäki 2006:3). It is not the regularity with which laboratory experiments produce similar results that constitutes a causal connection, but the stable 'power' of

[35] Such conjectures are creative constructs of language, to be sure, but as such they identify, but cannot change, the actual powers and laws underpinning reality (Bhaskar 2008:92). At most, they identify 'a generative mechanism [that has] endured as a latent potentiality of nature until *awakened* by science under experimentally controlled conditions' (Bhaskar 2008:91n35).

some entity to produce certain effects in the 'open system' of the 'real world', absent any imposition by other entities (Wight 2006:32).

But although they readily admit that in an open system, many things collide and interfere, when critical realists grapple with the implications of open systems for scientific knowledge, they end up lamenting the problem of Time. Empirical regularities are too much to hope for due to the following features of open systems: 'complexity' (Dean, Joseph, Roberts, and Wight 2006b:14, 17; Kurki 2007:11, 18, 68, 91, 169; Roberts 2006:89; Wight 2006:50, 256, 262–63, 289), 'multiple and changing forces' (Kurki 2007:92), 'ever-changing relations between the two realms' of ideational and material factors (Wight 2006:298), tangled 'webs of relations in social life' (Wight 2006:162), 'structural relationships that are constantly changing' (Wight 2006:299), speed and interconnectedness (Patomäki 2006:10), and historical heterogeneity (Roberts 2006:83). All of these features evoke the problem of Time in critical realist discourse. And because it forwards an alternative to these phenomenal features in a vision of *reality* as the *ontological* realm *beyond*, *behind*, or *beneath* the 'flux' and 'fluidity' of social life and empirical observation (George and Bennett 2004:137; Dean, Joseph, Roberts, and Wight 2006a:167; Dean et al. 2006b:17; Kurki 2007:93), critical realism can be understood as providing a solution to the problem of Time. Actual reality is composed not of temporal features like 'sequences of events' but of something deeper, more stable, and more reliable—'the things that produce and the mechanisms that generate the flux of the phenomena of the world' (Bhaskar 2008:33, 66).

Critical realism's inhabitable narrative: a science of emancipation

This vision of reality is crucial for critical realist science: 'If science is to be possible the world *must* be one of *enduring* and *transfactually* active mechanisms; and society *must* be a *structure* (or ensemble of powers) irreducible to but present only in the intentional action of men' (Bhaskar 2008:248 emphasis added). Rendering the 'chaotic complexity' of the phenomenal world (Wight 2006:294) more intelligible is the primary task of science, and requires locating 'deep causes' (Kurki 2007:15, 11) and 'underlying' (Kurki 2007:15), 'relatively enduring' (Wight 2006:248) structures or mechanisms which interact in complex and contingent ways to produce phenomena. These contrasts between appearance on the one hand and reality on the other all recapitulate traditional antitheses between fluvial and stable metaphors, which proxy for the more venerable antithesis between Time and eternity. They also recall classical metaphysics, where what *lasts* received ontological priority over what *passes*

and speculation moves 'from manifest behavior to essential nature' (Bhaskar 2008:248).[36] Although it is highly unlikely that critical realists would go so far as to argue that the phenomenal realm is a 'movable image of *eternity*' (Plato 1925:37c–e),[37] they nevertheless treat the problematic features of Time as *merely* experiential—we might say a 'moving image of *reality*'—since 'the world itself is structured, orderly, and endures *over* time' (Dean et al. 2006b:8 emphasis added).

It is these features of the 'real' world that allow critical realists to enact a scientific and emancipatory narrative (see Patomäki 2002:210–36, 2003, 2006; Bhaskar 2009; cf. Sayer 1997). Within the broad philosophical stance that there exists a minds-independent reality that we can come to know more or less depending on our knowledge practices, *critical* realists want to mobilise this promise toward the mitigation of human suffering. There are no guarantees that people grasp mind-independent reality accurately, which means that *unnecessary* structures of inequality or domination based on *false* beliefs may overlay the true foundations of society (Wight 2006:57). This gap between minds and reality 'opens up the possibility for social theory, and knowledge in general, to play a role in an "emancipatory spiral", since social scientific knowledge of a particular set of beliefs may lead to a change in those beliefs. To say some particular institution or social structure causes false belief is to criticise it; and… institutions that cause false beliefs should be replaced by, or transformed into, those that cause true ones"' (Wight 2006:58, also 51). For critical realists, this is much more than a matter of providing novel ideas about how to go on: 'It is a complex matter of finding and disentangling webs of relations in social life, and engaging in explanatory critiques of the practices that sustain them. This may indeed often involve the detection of various types of false and otherwise unhappy consciousness. … Such explanatory critiques will necessarily involve *action* rationally directed to transforming or disconnecting the structures that explain the experience of injustice and other ills informed theoretical reflection has diagnosed' (Wight 2006:162; Patomäki 2002:126).

This link between scientific knowledge and human emancipation loads 'science' with ethical value. Scientific knowledge is contrasted with 'propagandistic or strategic attempts to manipulate others' anticipations' (Patomäki 2006:17), and involves more than just the rational apprehension of empirical laws or even of the way the world really works. It also aims to

[36] Wight (2006:61) describes this as a 'gradual' process in which full 'coherence and convergence' is an impossible yet 'regulative ideal'.

[37] In fact, critical realists try to distance themselves from this (Wight 2006:232; Kurki 2007:25), but in addition to the brief remarks above, see (Plato 1969:517b, 1925:38b, 39d–e; cf. Jackson 2011:44) on the need to penetrate 'past mere appearance' or the 'Eternal Nature' of the real.

make possible 'better, that is, more empowered, more ethical and more virtuous ways of being and action' by encouraging 'informed choices' rather than false consciousness (Patomäki 2002:92; Wight 2006:60). Explanations also provide the 'concrete knowledge' that facilitates 'practical purposes, such as planning and/or material interventions into the world' (Wight 2006:163). All of this amounts to telling 'better stories about world politics' (Patomäki 2002:70–96), which are themselves crucial steps the broader emancipatory metanarrative of alleviating oppression. For instance, 'an epic tale par excellence' that is 'exciting' and 'dramatic' holds the potential to 'play an important role in the emergence of new movements and forms of political agency' that make 'emancipation and edification possible' (Patomäki 2010:165, 2002:92).[38]

Thematic standard: stable ontology

In the critical realist vision of an inhabitable world, human emancipation depends in part on true knowledge, and true knowledge is that which 'penetrates' to the way things really are at the 'deeper', more fundamental level of ontology (Patomäki 2002:92; Wight 2006:30; Kurki 2007:11). It might seem as if the ontological '*depth*' of 'hidden layers' provides critical realism's thematic standard (Wendt 1987:370; Patomäki 2002:92; Wight 2006:35, 60) but in addition to residing 'beneath' the bubbling surface of experience, what makes these layers more real is that they are more *stable*. Going 'beyond appearance', then, is precisely a search for 'underlying structures which *endure longer than those appearances* and generate or make them possible' (Wight 2006:35n85 emphasis added, also 60). What is *real* is what *lasts* and what generates the things that *pass* through our senses (Bhaskar 2008:242). Critical realist inquiry therefore flows from empirical 'demi-regularities' toward a sub-experiential, ontological bedrock where real entities reside—which is to say they *endure* (Manicas 2006:99; Bhaskar 2008:11–12, 246).

As critical realists understand it, 'the significance of experimental activity in natural science is that it gives us access to enduring and transfactually active structures' (Bhaskar 2008:245). But since social science cannot avail itself of experimental control, the challenge is to devise or reconstruct 'an analogous procedure of inquiry' subject to 'selective' confirmation and falsification (Bhaskar 2008:245). This may sound like neopositivism again, except that instead of telling tall tales of open systems in closed laboratories, critical realists use

[38] Given the lengthy history in international politics of yoking putative truths to purportedly progressive intentions, those steeped in more sceptical literatures might view this less as a scientific epic and more like a hubristic rerun of a tragic drama (see Carr 1939; Lyotard 1984; Morgenthau 1946).

metaphor and analogy to develop *abductive* explanations for empirical phenomena (Wight 2006:61).[39] Since they cannot penetrate to the durable ontological realm with a literal drill, critical realists work from available data to *imagine* some entity which, 'if it was to exist', would *plausibly* account for a phenomenon of interest (Roberts 2006:70; Wight 2006:34; see Jackson 2011:82–83). Stronger still, abduction constructs an account 'of what *must have taken place* in order to leave the evidence that we see today' (Chakravartty 2010:5; Patomäki 2010:152 emphasis added).[40] This means that if an explanation posits some unobservable entity that is necessary for the explanatory plot to work and no more plausible story exists, then we have a warrant for its reality credentials—we *should* believe that it really exists.[41] Critical realists defend abductive reasoning by the 'miracle argument' (Wendt 2004:290), which states that science *must* be progressing toward a more accurate understanding of the real durable entities responsible for observational data because if it were not its substantial successes could only result from a miraculous series of coincidences allowing spurious theories to be consistently right for wrong reasons. Absent such a miracle, science progresses only when it converges on real, deep, and enduring structures (Bhaskar 2008:20; Wight 2006:38–40).

Abduction is openly narrativistic (Kurki 2007:285–86; Patomäki 2010:152). It is synoptic in that it provides 'a whole conception of the world that includes our observations *along with* the posited explanatory factor(s)' (Jackson 2011:83). It also employs forward and backward reference, since the point of abduction is to show that '"the condition stated in the conclusion is indispensable to the feature identified at the start"' (Jackson 2011:102). It works or not based on how coherently and plausibly it configures the available empirical evidence (Patomäki 2002:129). When abductive narratives are well-configured, they provide a 'relatively credible *window*' between the ephemeral realms of empirical phenomena or constructed knowledge and the deep layers where durable and causally powerful complexes reside (Patomäki 2002:129 emphasis added). Finally, abductive narratives are embedded in the critical realist metanarrative of a world amenable to scientific emancipation. This metanarrative entails that abduction follow the thematic standard of stable ontology, which in turn provides a standard for integrating and coordinating irregular empirics.

[39] Critical realists also call this 'retroduction' (Wendt 1987:352n38), or 'inference to the best explanation' (Chakravartty 2010:5).

[40] E.g. gravity, which is unobservable except by its effects, yet plays a crucial role in physical explanations.

[41] Jackson (2011:110) refers to this as a 'transcendental' form of reasoning that provides both the 'initial derivation of elements' in the story and a means of 'vetting' that story.

Creative filtration: intransitivity

Whereas neopositivists scrub Time of all but its most determinate features, critical realists are happy to include complexity, contingency, and context in their narrative explanations (Patomäki 2002:76; Wight 2006:289; Kurki 2007) if these elements can help explicate why we did or did not observe a phenomenon. This identifies abduction as a much more classically narrativistic mode of reasoning than neopositivist inference, since by and large standards of ir/relevance are set by the requirements and constraints of individual explanations. However, in one respect, critical realism's methodological thematic of deep, enduring, and unobservable ontological entities leads to a particular sort of creative filtration that deserves scrutiny. In addition to substantive relevance, critical realists insist that abductive stories feature *intransitive objects* of *transitive knowledge* (Wight 2006:248; see Jackson 2011:108). This has significant implications for both what goes in an abductive story and where in the plot it can function. Something is intransitive if it 'does not pass over to an object', or 'does not pass on to another person'; while transitivity indicates '[p]assing or liable to pass into another condition, changeable, changeful; passing away, transient, transitory'.[42] This marks a conflation between reality, depth, stability, and intransitivity; and is consistent with critical realists' embrace of the general oppositions between passing and lasting or Time and eternity that we saw inform their problem with Time. In some cases, the emphasis is more on 'intransitive objects of knowledge … which are not produced by men at all' and are therefore 'in general *invariant* to our *knowledge* of them' than on those objects' intrinsic stability (Bhaskar 2008:21–22 emphasis added; also Patomäki 2002:77), yet there is a clear connection between human production or dependence and the quality of transience that critical realists want to get beyond. For example, ontology indicates 'real structures which endure and operate independently of our knowledge' (Bhaskar 2008:25, 17). Despite their significant break with Humeanism, which views causation as the 'regular succession' of events, this wide-ranging conflation suggests that critical realists still rely on a similar, quasi-eternalist promise that *stability* and *invariance* vouchsafe the actuality of reality. Although by the time they bubble up to the empirical level causal entities will have been changed by their interaction with other entities or simply by 'sufficient … time', what makes them 'genuine', ontological entities is that they are unchanging (Patomäki 2009:312; Bhaskar 2008:21–22).

In contrast with intransitive ontological objects, transitive discursive objects cannot constitute reality but rather provide the intrinsically malleable 'raw materials' by which sci-

[42] (Intransitive, Adj. 2013, Transitive, Adj. 2013).

entific knowledge converges toward reality.[43] As transitive, scientific knowledge can be accurate or not, but in critical realism it does not directly influence its objects.[44] However, since 'the clean, recurrent stream of cause and effect' found in laboratory conditions is not available to social inquiry (Wight 2006:30; George and Bennett 2004:137), critical realists must make hypothetically intransitive entities the focal points of abductive stories. This produces stories that privilege intransitive elements and objects in one of two ways.

First, abductive stories posit an enduring, intransitive entity as 'indispensable' to some puzzling experience (see Patomäki 2002:129; Wight 2006:280; cf. Jackson 2011:102) without which it could not have happened as it did or been initiated in the first place. It is in this sense that a critical realist might identify some intransitive entity as a 'generative mechanism' underlying 'the actualisation of events and their empirical observations' (Kurki 2007:166; Wight 2006:30).[45] Second, and more interestingly for critical realist social scientists, stories secure enduring, intransitive entities by explaining why they did *not* actualise the events to which they were disposed or why these events did *not* result in empirical observations. As Wight (2006:30) writes, social entities 'are part of a natural interactional complexity that results sometimes in particular causal relations, while at other times in the suppressing or complete neutralisation of the generative effects in question'.

This is why critical realists insist on contingent and complex narratives (Wight 2006:289; see Kurki 2007:1–22, 115). It is by *adding* story elements and showing how they *interfere* with the natural disposition of some ontological entity that they can explain empirical irregularities *and* explicate ontological regularity. If reality is stratified, and each lower layer is more stable than the last, then a reasonable explanation for why a low-lying entity does not penetrate 'upwards' to the experiential layer is that some things in the layers in between got in the way. A benefit of this is that critical realists can then explain *both* empirical regularities and irregularities by reference to some deep, enduring entity (see Patomäki 2009:321). Empirical regularities result from deep, stable, entities. Empirical irregularities also result from deep, stable, entities whose actualisation is confounded by some other entity, which explains the empirical irregularity without threatening either entity's ontological status. Given that critical realists view irregularities as the more typical feature of social life, this

[43] For example, 'the events of 11 September 2001, the Cuban Missile Crisis and the Holocaust were as they were, independent of anything we might write of them today' (Wight 2006:39), and thus provide the ultimate criteria by which scientists adjudicate competing explanations.

[44] Although in the social realm, it does help human action to change those objects, which introduces some tension in the conflation between enduring and intransitive.

[45] Although they also might proceed more like neopositivists, by 'measur[ing] changes in the entity being acted upon after the intervention of the causal mechanism and in temporal and spatial isolation from other mechanisms' (George and Bennett 2004:137).

move is crucial to their efforts to defend an intransitive and enduring reality. It also emphasises the *creative* in creative filtration: in critical realism this process is as much additive as reductive, since it often involves making *more* information relevant to the story in the form of hypothesised but unobserved entities.[46]

This second sense in which critical realists creatively filter the elements that go into abductive explanations is intimately linked to their strong ontological claim that the 'actual is only a part of the real world, which also consists of nonactualised possibilities and unexercised powers' (Patomäki 2006:9). In defence of this sort of creative filtration critical realists warn against the 'epistemic fallacy', which denies ontological status to things which we cannot experience or know with certainty (see Bhaskar 2008:36–37; Jessop 2010:187; Wight 2006:28, 246, 252; Wight and Joseph 2010:9–10, 18; Yalvaç 2010:170).[47] Yet by combining creative filtration for intransitive entities with the 'miracle argument', critical realists commit something of an *ontological fallacy* by asserting that the existence of a mind-independent world entails that we can come to 'know' it. After all, it is the *narrative indispensability* of an un-experienced intransitive entity that establishes it as existent *independent of our efforts*, which presumably include emplotting it in an abductive narrative.

Inasmuch as its outcome is to re-assure us that there actually are stable 'real' things underlying the flux of experience, this marks another way of defending the world from the ravages of Time. Consider that even though successful abduction opens a 'window' between experience and reality, the latter remains 'always partially alien or uncovered' (Patomäki 2002:129), so we cannot rule out that some other enduring entity is responsible for events that confound our expectations. This means that there is no *direct* way to verify or falsify its existence.[48] Since reality exceeds phenomenal experience, and we can come to know some (but never all) of it through abductive storytelling alone, critical realism enjoys substantial epistemological insulation. As long as the story adequately and appropriately 'fits' and relates observed phenomena to a necessary and plausible whole and no more plausible story exists, critical realists conclude that they have caught at least a glimpse of the window on intransitive reality. Furthermore, rather than scrapping a story due to confounding evidence, critical realism explores whether that evidence signals the need for additional stories or story ele-

[46] That is not to say that critical realists do not subtract anything from the data of experience. After all, one of the purposes of abduction is to render confounding empirical data *less* relevant to speculation about a given real object.

[47] It is not clear that anyone in IR or contemporary philosophy commits the epistemic fallacy outright, since most scholars readily admit that their minds do not exhaust the world (Gunnell 2011:1461).

[48] Instead, critical realists rely on a thoroughly narrative process of 'dialectical oscillation back and forth between empirical observation and conceptual refinement' (Jackson 2011:103).

ments that when taken together provide a stockpile of explanations that account for significant variation among phenomena (see Jackson 2011:103–04).[49] By this inventive use of creative filtration, critical realists can work outside the clean 'stream' of laboratory processes, without submitting to the confounding torrent of Time.

These points do little more than signal that critical realists employ narrative to respond to the problem of Time. On its own, this would not be that noteworthy, since they openly embrace narrative. Yet, the critical realist reply to Time remains confrontational by virtue of a conflation at the heart of its thematic standard—'real' goes with 'deep', 'enduring', and 'intransitive', while 'mere experience' goes with 'surface', 'flux', and 'transitive'. In these oppositions, critical realists recapitulate the venerable antithesis between the perils of Time and the promise of eternity.

That opposition originally occurred in either religious or philosophical speculation. And although I have already noted the metaphysical implications of critical realism, there is also a pungent whiff of *theological* zeal in critical realists' faith in the enduring stability of real but unobservable entities. For instance, in addition to refusing empirical evidence as a decisive test of an unobserved entity, critical realist might even *insist* on believing in an unobservable entity if there were no better account of a given experience. This opens up the possibility that a belief in the reality of miracles, angels, and gods might be scientifically warranted (Bhaskar 2000:50ff). Since there are always deeper ontological levels underlying whatever one we have rendered intelligible by identifying its intransitive aspects (Wight 2006:36–37), there is no reason those levels might not be inhabited by such beings. And since ontology comes first, faithful critical realists would have to acknowledge that if supernatural beings are indispensable in the most plausible abductive explanation, then they are 'there' in the real world whether we deny it, affirm it, or cast them out of naturalistic explanations.[50] Here the traditional opposition between Time and eternity and critical realism's inventive use of narrative timing devices come full circle: given their tendency to dissolve stability and order and inhibit successful actualisation, the ancient and malevolent Time deities that featured in ancient cosmologies are *just* the interfering factors that critical realists need to explain empirical irregularities and other discordant experiences. It is perhaps not coincidental that one

[49] This is a perpetual project, for 'underlying each mechanism, or level, there are always other levels waiting to be explained' (Wight 2006:36). The logical (if not the practical) endpoint of this vision of intellectual progress is Carroll's (1893; see also Borges 2000b:181; George and Bennett 2004:143) 1:1 scale 'map of the world'.

[50] Here the miracle argument can be turned around: if reality is stratified and partially inaccessible, there is no guarantee that a demon does not lurk 'beneath' the objects and practices of science, arranging for his amusement just the confluence of errors that the miracle argument denies (see Descartes 2008:16).

critical realist claims that successful abduction 'baptizes' unobservable phenomena (Wendt 1999:63).

But critical realism has got more religion still. Compare its hope in '*knowing* the unobservable' (Chakravartty 2010 emphasis added) and its contention that 'there are things going on, as it were, beyond and behind the appearances that are not immediately accessible to our senses' (Wight 2006:29) with the prophet Isaiah's (Is. 48:6) promise to 'tell you of new things, of hidden things unknown to you' or Jesus of Nazareth's promise that 'I will utter things hidden since the creation of the world' (Matt. 13:35; Luke 8:17; cf. Ps. 78:2).[51] In Judaism and Christianity, salvation occurs when false belief is overcome by appeal to an eternal truth above the human realm; in critical realism, emancipation occurs when false consciousness is overcome by appeal to an enduring reality beneath experience. While in theology God sets the 'hands of time' in motion, in critical realism successful abduction restores faith in '"an underlying clockwork reality"' as the ontological foundation of the world (George and Bennett 2004:143n36). And like any clockwork, critical realism's deep ontology holds the promise of successful timing inasmuch as knowing more and more about stable and enduring features of the world allows us to orient and coordinate ourselves and to intervene effectively in it (George and Bennett 2004:143n36). So although it departs neopositivism in many ways, critical realism still tries to tame the problem of Time in its '"quest for certainty"' and 'search for the indubitable', both of which satisfy '"a longing for the transcendent"' and the eternal (Gunnell 2011:1469).[52] Whether God or nature is the watchmaker, the key to sound knowledge and successful action is some chronometric standard by which existence can come to know reality and thus act successfully.

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Despite a deep dissatisfaction with neopositivism (Wight 2006:14–61; Kurki 2007:23–146), critical realists follow a parallel path when it comes to grappling with Time. Both despair of the fleeting, surprising, and discordant nature of the human realm and both privilege symbols of eternity as the standards and goals of narrativised reasoning. As with neopositivists, I do not take issue with much of critical realist's narrative attempts to render the phenomenal world more intelligible. In particular, their emphases on complexity and contingency in ex-

[51] Indeed, a more dramatic critical realist account might begin to sound like *This Present Darkness* (Peretti 2003), a contemporary Christian novel that pits unobservable yet very real angels and demons against each other for control of the human realm.

[52] See (Gen. 21:33; Deut. 34:4).

planations represents an innovative if partial reconciliation between human experience and the problem of Time because it allows critical realists to explain empirical inconsistencies while also explicating ontological endurance. Yet in their vision of a world amenable to a critical science of emancipation, their durable-ontological thematic, and their preference for intransitive story elements, critical realists still oppose much of what characterises Time's flow with a quasi-eternal vision of reality in which positive outcomes depend upon action based on knowledge of the durable, lasting features of the real world beyond our senses. They seek a scientific framework to rival neopositivism, so it is little surprise that they tap into the august Western tradition of girding 'science' with stability, reason, and truth. However, this means that critical realism does not provide a genuine alternative to neopositivism so much as it is vies for the scientific mainstream by proposing a different metre for timing international politics.

Interpretivism: humanising Time?

Interpretivism represents a particularly interesting case for our discussion of narrative timing. In addition to openly embracing narrative, many interpretivists self-identify as more 'time-sensitive'. This suggests somewhat of a departure from the problematic relationship between theory and Time found in the other methodologies. For this reason I delve directly into proponents' comments about Time instead of summarising the approach. This also makes sense because 'interpretivism' is a capacious term under which I subsume approaches to studying international politics referred to elsewhere as constructivist, English School, critical theoretical, or postmodern; so a summary such as those provided in the previous methodologies is infeasible.[53] My hope is that in the course of explicating interpretivists' engagement with Time and the academic narrative they inhabit, the broad contours of this methodology will become clear.

Interpretivism engages the flow of Time

Interpretivism openly uses narrative timing to render some puzzling phenomena less puzzling by emplotting it in a coherent account that may enable effective political action. Interpretivists are interested in timing international politics just as much as neopositivists and critical

[53] 'Reflectivist', 'post-positivist', 'hermeneutical', 'historical', or 'reflexivist / analyticist' are potentially suitable alternatives. I chose 'interpretivism' because it is as recognisable an umbrella term as any within a field that has struggled to order many non-mainstream approaches to study. This combines methodological stances treated as distinctly 'analyticist' or 'reflexivist' in Jackson's (Jackson 2011:36) recent ideal typology of IR, which seems to view 'interpretivism' as insufficiently clear about the philosophical issues at stake in various methodological choices.

realists, since they are trying to integrate and coordinate discordant change continua for the sake of knowledge and action. Interpretivists proceed by explicitly instrumental 'idealizations or oversimplifications' that help to 'order the complex chaos of empirical reality into more comprehensible and manageable forms' (Jackson 2011:113). This already sounds much like the beginnings of the earlier confrontations with Time found in neopositivism and critical realism, in which the phenomenal features that confound scientific progress were just those traditionally associated with the problem of Time, yet interpretivists claim to embrace Time.

They begin by acknowledging that the social world is neither fixed nor necessarily stable, much as neopositivists and critical realists do. But for interpretivists this is not a problem that confounds visions of a unified scientific method or hopes of accessing an enduring reality beneath fluid experience; rather, it simply indicates that 'international politics *has* to be "understood as a temporal sequence of events"' that, for English School theorists, renders 'hard' scientific theoretical approaches 'inadequate to the extent that they "employ a timeless language of definitions and axioms, logical extrapolations or assertions of causal connection or general laws, and do not by themselves convey a sense of time and change"' (Linklater and Suganami 2006:89 emphasis added; Linklater 2007a:46–47). Similarly, constructivists reject law-like generalisations precisely because 'social life is fundamentally temporal', so the 'contingencies are too great, the role of unanticipated consequences too pervasive' to submit to rigid and universal standards (Pouliot 2007:372; Ruggie 1998a:135; also Klotz and Lynch 2007:9, 18; Weldes, Laffey, Gusterson, and Duvall 1999).[54] And critical theorists insist that dealing 'with a changing reality' requires that theory 'continually adjust its concepts to the changing object it seeks to understand and explain' (Cox 1981:129).

Yet although they are clearly less troubled than neopositivists or critical realists by the unique challenges that attend the process, interpretivists do not simply embrace the totality of Time in all its confounding discordance. Rather, they work to *placate* its messy, unpredictable, and disjunctive flow with a narrative temporality that is orderly and intelligible enough to support human action but not so stringent as to elide the richness of human experience. And where other methodologies attempt to *tame* Time by *gauging* it against antithetical and quasi-eternal standards like durable depth or regular laws, interpretivism primarily attempts to *humanise* Time by *engaging* it with minimally invasive standards meant only to effect a 'useful' rather than law-like or necessarily real 'ordering of experience' (Jackson 2011:38). However,

[54] Alternatively, they may reject general laws about recurring patterns on grounds of human agency (Bobbitt 2003:826).

we will also see that this engagement can easily slide into a more confrontational relationship with Time.

Interpretivism's inhabitable narrative: provisional and emancipatory

Interpretivists refuse a primarily confrontational relationship with Time due to a disciplinary and vocational self-understanding that encourages an interest in *in*stability and change. Most interpretivists are not as subservient as other methodologies to a narrative of scientific progress borrowed from philosophical reconstructions of natural science successes (Pouliot 2007:378; Gunnell 2011; Jackson 2011), which begin with standards of stability instead of phenomena that change. These standards enforce unrealistic epistemic expectations whose utility for explaining and influence social life has never been adequately justified. Therefore, social science has to proceed provisionally and in a relatively *ad hoc* manner to produce its own particular brand(s) of knowledge, which should not be subject to foreign inspection (see Gunnell 2011; Jackson 2011:188–212).

Some interpretivists view this meta-narrative as part of a wider emancipatory story in which many of the so-called 'vagaries' of Time provide crucial evidence of the malleability of the status quo. As two critical security theorists write: 'If the objective (or at least the outcome) of much scholarship … has been to render the question and problem of security *apolitical* and largely *static*, critical theory takes the question of *change* as its foundation' (Krause and Williams 1997:xii emphasis added). This challenges the 'immutability thesis'—comprised of 'empirical claims about the social world which assume that existing structures are immutable'—that underpins much of IR and supports 'structured inequalities of power and wealth which are in principle alterable' (Linklater 2007a:47). Within the emancipatory or 'critical' interpretivist camp, some scholars then focus on their own position in the social world. In order to destabilise dubious structures, social knowledge must be 'grounded in and warranted by the researcher's concrete implication (and perhaps, imbrication) in sets of social relations' (Jackson 2011:159–60), so that by understanding the present and how we got to it researchers can help bring about different, less dubious modes of organisation in the future.

Thematic standard: insider accounts

Because they inhabit a provisional and practical narrative of scientific inquiry, interpretivists eschew quasi-eternal thematics as a standard by which to develop social knowledge. For Hedley Bull (1966:368; see also Klotz and Lynch 2007:20), analysts of international politics who rely on systemic, structural, or deductive brands of theorising are 'simply shut off from

contact with the subject' and are therefore 'unable to develop any feeling … for the play of international politics'. On this point, other interpretivists come extremely close to acknowledging the idea of a *timing standard* and more specifically a *narrative timing metre* at the core of neopositivist theorising when they criticise it for 'the *imposition* of a *ready-made* plot structure on an independent set of events' instead of a 'dialectic process between multiple events and some theme that gradually coalesces in a single story' (Polkinghorne, quoted in Ruggie 1998a:94 emphasis added).

Instead interpretivists opt to develop substantive narratives about international politics informed by one of two 'insider' thematics. The first is an immersion in some other actors' experience '"content with nothing other than whatever may prove to be the nearest practicable approach to a personal participation"' (Linklater and Suganami 2006:100 quoting Manning; also Dunne 1998:119, 187; Pouliot 2007:368–69). Interpretivism earns its name here, since this requires 'penetrating the minds'[55] of social actors as much as possible by coming to *understand* the meanings that contexts, choices, and actions have for them in the situation in question (Dunne 1998:7–8; Ruggie 1998b:859, 877; Linklater and Suganami 2006:101).[56]

Sometimes this insider account entails a historical approach in which 'the analyst needs to build a narrative dynamic account that tells the story of a variety of historical processes as they unfold over time' and traces 'the historical evolution of meanings' (Pouliot 2007:367; also Dunne 1998:119–20; Koslowski and Kratochwil 1994:227; Klotz and Lynch 2007:9; Linklater and Suganami 2006:86–87; Ruggie 1998a:32). Such an account can provide important background information about current international events, a source of comparison that 'helps deepen our understanding of particular instances' (Linklater and Suganami 2006:88).[57] The narrative historical approach typifies much English School theorising (see Bull 1977; Watson 1992; Buzan and Little 2000) in which the relation of history to theory is considered complementary rather than oppositional, as it usually is in neopositivism (Linklater and Suganami 2006:84–85; Buzan and Little 2000:29; also Pouliot 2007:366–67). In all three, synoptic judgment is an essential component.

[55] Note that where critical realists try to penetrate to ever deeper and more stable ontological sub-strata, the interpretivist metanarrative of provisional knowledge asks them only to get inside someone's fallible, finite, and perhaps ephemeral head.

[56] This thematic owes much to Dilthey's 'hermeneutic circle' (Kurki 2007:69; see Pouliot 2007:365) and to the Weberian *Verstehen* tradition in sociology, which aims for 'a "direct" or an "empathetic" understanding' of action (see Ruggie 1998b:860; Jackson 2011:112–53). On the differences between Weber and Dilthey, see (Outhwaite 1986; Martin 2000).

[57] Done well, historical analysis may even produce 'inexactly expressed empirical generalizations' that are heuristically and analytically useful without being comparable to general laws in the physical sciences (Linklater and Suganami 2006:97–98).

The second and related insider thematic is to include and even foreground reflection on the researcher's intellectual practice. Here 'inside' refers to the analyst's mind rather than the empirical actor's. This is particularly salient for emancipatory interpretivists because challenging extant arrangements requires becoming as 'reflexive' as possible about the production of knowledge since they are embedded in the broader social milieus of academic engagement and sociopolitical practice (Jackson 2011:xx). To reject the immutability thesis is to challenge the idea that (social) facts have 'essential properties' or even perpetually stable meanings independent of their context and purpose in some political project, which is in need of 'ideological excavation' (Klotz and Lynch 2007:13). At this point, historical narrative becomes *historicising* critique—the process of rendering naturalised or reified social structures and practices contingent and open to contestation. Historicising critics are principally concerned to assess the significant challenges involved in accomplishing 'radical change' while avoiding a sense of 'resignation' that present arrangements are simply a matter of 'fate' (Linklater 2007a:46).[58] The second type of 'insider' thematic is additionally evident in post-structural and postmodern IR theorising, which have lately embraced 'autoethnographic' (Bleiker and Brigg 2010a, 2010b) and autobiographic (Inayatullah 2011) approaches while debating the place of 'authorship' in the reading of texts (Laffey 2010; Weber 2010). In both cases synoptic judgment is crucial, since the goal is to construct '*a larger picture of the whole* of which the initially contemplated part is just one component, and … to understand the processes of change in which both parts and whole are involved' (Cox 1981:129; Linklater 2007a:45).

Creative filtration: ideal typification and counterfactuals

Flowing from a metanarrative in which social scientists develop provisional and perhaps emancipatory knowledge, the thematic standard of an insider account encourages interpretivists to pursue what Ricoeur (1984:54) calls a 'semantics of action', 'the capacity for identifying action *in general* by means of its *structural features*'. For interpretivism, this is the only way to proceed from pure idiography to minimally systematic and therefore social scientific knowledge without resorting to the puristic standards found in neopositivism and critical realism. Although much more open to idiographic description than other branches of social in-

[58] Non-critical historical accounts too easily become a mere 'quarry providing materials with which to illustrate variations on always *recurrent* themes', at which point the 'mode of thought ceases to be historical' because it 'dictates that … the future will always be like the past' (Cox 1981:131). This difference hinges on the narrative issue of whether to privilege a theme of continuity or disruption, the latter of which evokes the problem of Time.

quiry, interpretivists nevertheless acknowledge that knowledge is also 'a matter of our isolating, by abstraction, a part of the "conditions" which are embedded in "the raw materials" of the events and of making them into objects of judgment' (Weber 1949:185). Whereas the flow of Time is constituted by a totality of change continua that are each unique in their own ways, knowledge and judgment cannot be 'concerned with any and every thing which may be called individual, but rather with those things and events which are in some way meaningful, or are relevant to human interest and experience' by virtue of some minimally general quality (Hofstadter 1945:58; Ruggie 1998a:94). To get from 'any and every thing' to meaningful objects of knowledge, interpretivists rely on two creative filters, ideal typification and counterfactuals, both of which serve to select important elements from the overall flow of phenomena in Time but in a way that seeks more of a balance between fluid phenomena and a minimally orderly and stable account of action. Interpretivism thus marks an effort to *manage* rather than *confront* or *tame* the problem of Time.

Drawn primarily from Max Weber, an ideal type provides a 'disciplined ordering of the facts of experience' (Jackson 2011:114). Rather than an empirical observation or a deeply nested, real and complete structure, it is an instrumental, heuristic device—a '*deliberate oversimplification* of a complex empirical actuality for the purpose of highlighting certain themes or aspects that are never as clear in the actual world as they are in the ideal-typical depiction of it' (Jackson 2011:37 emphasis added), and 'a purely ideal *limiting* concept with which the real situation or action is *compared* and surveyed for the explication of certain of its significant components' (Weber 1949:93, quoted in Ruggie 1998b:860; Linklater and Suganami 2006:103). Furthermore, ideal types are not themselves causal arguments, although they are used 'in the "imputation" of causality', the primary efficacy of which is to help 'pinpoint differences between [their] logic … and patterns of outcomes on the ground' (Ruggie 1998b:860–61) so as to allow the researcher to 'discriminate between adequate, coincidental, and incidental factors' in concrete phenomena (Jackson 2011:152). Inasmuch as they help analysts choose what to privilege in a description that cannot be comprehensive, ideal types extract from the flow of Time elements that can be used in an effort to render some phenomenon more intelligible through narration. In this sense, ideal types are narrative timing devices because they are selected with reference to the explanation's substantive thematic and because they serve to highlight a 'deviation' between actual events and the analyst's ordering of them. However, thanks to a more flexible metanarrative of what counts as scientific knowledge and a correspondingly capacious thematic standard, this deviation is more of an opportunity for further research than something that must be filtered out of any finished ex-

planation—as in neopositivism—or something that interferes with an enduring entity's ability to manifest effects in experience—as in critical realism. Furthermore, interpretivists use ideal types to elevate two factors (coincidental and incidental) that other methodologies subordinate.

Constructivists' use of ideal-typification is well known (Barkin and Cronin 1994; Wendt 1999:257; Browning 2008:290–92; Klotz 2008:57), but English School theorists have also relied on ideal types. Martin Wight's 'international theory' presented three ideal types—realism, rationalism, and revolution (see Linklater and Suganami 2006:94), while Bull's international system, international society, and world society are 'best construed as ideal-types in the light of which a given world political structure can be depicted' (Dunne 1998:9; Linklater and Suganami 2006:103). Although critical theorists are less likely to acknowledge ideal-typification as a stock tool, their emphasis on emancipatory visions of future developments shares something with ideal typification in that the comparison between an ethical ideal and the present situation provides an evaluative matrix by which scholarship challenges extant political arrangements.[59] Here ideal typification serves a semantics of action (social scientific knowledge) embedded within an emancipatory metanarrative.

When ideal types feature in singular causal analysis (as opposed to cross-case covariation, see Jackson 2011:156, 200), their purpose is counterfactual. They are used 'to pinpoint those moments of historical contingency where things could have gone off in quite another direction, and then weigh … the importance of particular factors in producing the outcome that we actually see' (Weber 1949:166; Jackson 2011:199, 152).[60] Interpretivists readily admit that this involves 'the creation of—let us say it calmly: —*imaginative pictures* through the disregarding of *one or more* components of "actuality" that have been factually present in reality' as long as the overall operation accords with the 'rules of experience'(Weber, quoted in Jackson 2011:148; Weber 1949:166).

This is not the same use of counterfactuals as in neopositivism (cf. Jackson 2011:199; King et al. 1994:89). Although interpretivist counterfactuals involve imagination, their standard of creative filtration derives from experience (see Ruggie 1998b:880; Jackson 2011:20–21), not from the stringent and pre-fabricated thematic of experimental control found in neopositivism. Furthermore, interpretivist counterfactuals do not serve stories that can be aggre-

[59] Ideal types also appear in neopositivist reasoning and explanation, as when theorists evaluate decisions against a standard of perfect rationality that few if any humans possess (Ruggie 1998b:860–61).

[60] Historical contingency links ideal typification and genealogy, which shows how present arrangements could have turned out differently (e.g. der Derian 1991; Bartelson 1995a; Fuller 2002; Halpern 2002; de Goede 2005; Maloy 2008).

gated toward a conclusion about empirical regularity or law-like significance; they identify when and how the multifarious continua of change constituting international life intersect in adequate, chance, or malleable ways (Dunne 1998:187; see Ruggie 1998a:94, 1998b:861). With regards to the flow of Time, then, we might say that interpretivists use counterfactuals as tools for *management and comprehension* rather than *discipline and transcendence* because they seek to understand the structure of action in the phenomenal, Time-bound realm rather than to evaluate this realm against standards antithetical to it. That such a choice might inhibit the pursuit of physical scientific status represents no problem for interpretivists because they do not enact a story about the unity of science or about the reality of unchanging structures founding experience. Freed from such external constraints, interpretivists are able to use narrative to grapple with the flow of Time in a much *less fanciful* way than neopositivists or critical realists. Interpretivists employ ideal types and counterfactuals more openly and simply to establish and trace the salient features of a puzzling phenomenon. Compared with neopositivism's quasi-timeless multiverse or critical realism's quasi-eternal hidden layers, interpretivism pursues a more pitiless and willingly Time-bound experiential realism in its ways of reasoning.

For interpretivists, the flow of Time still presents discordant and sometimes overwhelming changes that scholars must grapple with in the pursuit of warranted knowledge. However, their metanarrative of science as a provisional pursuit allows interpretivists the latitude to include discordant events in stories about international politics that put contingency, uncertainty, and fluidity *to work* in the explanation of a single phenomenon. Where neopositivists and critical realists *discipline* these features of existence—either by excising them from 'scientific' accounts or by subordinating them to quasi-eternal standards—interpretivists *manage* discordant changes—they creatively filter them just enough to render them amenable to emplotment in substantive stories that must meet only the pragmatic thematic of insider knowledge. Because they are content to understand the minimally structural features of human action *in* Time rather than elevating stories about multiple worlds or ontological layers *beyond* Time, interpretivists are able to *engage* Time more easily.

However, this is not a methodologically hard and fast distinction, and when interpretivists skew toward neopositivism their relationship to Time becomes more confrontational. One illustrative example is Vincent Pouliot's (2007) 'sobjectivist' synthesis of interpretive methods, which unwittingly introduces a more oppositional relationship between theory and Time not found in much of the literature just surveyed. Sobjectivism involves 'detach[ing] the meaning of a practice from its advent' through intellectual transformations and then ob-

jectifying this meaning once 'through the interpretation of intersubjective contexts' and once again by 'historicization' (Pouliot 2007:366, 368). Although none of these are very different on their own from other interpretivist proposals and although he claims to appreciate that 'social life is fundamentally temporal', Pouliot (2007:366–68 emphasis added) aims for 'objectified meanings', which must 'lose their temporality and locality' so as to 'become open to *timeless*, *universal* interpretation'.[61] This presents some problems with regard to interpretivism's engagement with Time.

First, the narrative theory that Pouliot (2007:365–67, 372–73, 378) and I use understands narrative temporality more as the result of *transforming* the raw experiences of Time into manageable story elements than of removing 'temporality' and then reinjecting 'time and history'.[62] This may be a primarily rhetorical distinction, but it is telling that the rhetoric serves to make Pouliot's method appear more 'scientific' by neopositivist standards—contextual meanings are detached and 'stopped' only to be 'set in motion' in ways that further objectify them into 'timeless, universal' knowledge (Pouliot 2007:372). Second, and relatedly, it is not clear why the 'temporality of social life' becomes an objective element knowledge *only once it becomes* 'fairly static', while historians *can further objectify* meanings by introducing their own interpretations of 'time and history'. In any case, it is nearly impossible to reconcile any of this with Pouliot's (2007:372, 366 emphasis added) promise to 'to study "politics *in time*"', since he works so hard to take politics out of Time. If such facile comments about objectification and timeless universals sound like neopositivism's embrace of eternal metaphors, it will also surprise little that Pouliot (2007:372–73, 379) favourably cites formal methods and computer simulations as ways 'to "re-run" the tape of history thousands of time *[sic]* in order to model intersubjective evolution over time' or to provide 'a "social laboratory" for understanding how structures such as norms emerge from agency'. Temporal genuflection notwithstanding, Pouliot's desire to render interpretivism more amenable to a neopositivist understanding of 'objective knowledge' leads him to treat several qualities of Time as subversive features of social life that must be analytically disciplined in order to become legitimate elements of scientific knowledge. We might say that this move crosses a Rubicon of Time in that interpretivism must now *tame* or decisively *surmount* the river of Time instead of *engaging* and *managing* its flow.

[61] Although he cites Ricoeur's discussion of the 'objectification' of meanings as a condition of their explanation, once he crosses the threshold from temporality to 'timelessness', Pouliot's (2007:365–66) claim becomes suspect with regard to Ricoeur.

[62] This may be because Pouliot does not engage Ricoeur's *Time and Narrative* trilogy.

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Interpretivists engage Time using narrative mechanisms that abstract meaningful elements from its total flow and lend analysts leverage on the question of how the relationship between the past processes, present situations, and future possibilities can be understood and usefully altered. Since most narratives produce a singular change continuum unfolding in orderly sequence while Time's flow is composed of all the change continua that impact a phenomenon, the problem of Time may still 'return' to disrupt interpretivist narratives' ability to usefully order elements of experience. We recall here Spivak's (1990:18–19) observation that '[w]hen a narrative is constructed, something is left out. When an end is defined, other ends are rejected, and one may not know what those ends are.' In this sense, interpretivists also need the 'worlds enough' that narrative competency facilitates, and with 'less time' than the totality of Time itself. Yet because their metanarrative of science is one of provisional knowledge and action and their thematic standard of insider accounts is quite flexible interpretivists can admit and even embrace contingent, context-specific, and even inconsistent conclusions. As long as this is not corrupted by neopositivist liaisons that would harden interpretivist implements just where they should remain flexible, interpretivism remains relatively amenable to the continued passing of Time.

Conclusion

On examination, key methodological recommendations offered by neopositivists, critical realists, and interpretivists recapitulate narrativised responses to the flow of Time. Each methodology inhabits a scientific metanarrative, employs a guiding thematic for reasoning about the phenomena of international politics, and develops ways of creatively filtering phenomenal complexity. These moves map onto the relationship between narrativised action and narrative timing devices introduced in chapter two, and all are inflected by the extent to which proponents view the flow of Time as an existential feature antithetical to knowledge development and successful action. Thus, I conclude that a core component of the primary methodological alternatives in IR is to support *a general timing project called science* using *narrative timing devices* that *respond to the problem of Time*, although the manner and style of this response varies from provisional management to more confrontational efforts to discipline or eradicate altogether many of the features associated with Time's passage.

Neopositivists time international politics by rigorously reducing the number of relevant change continua that require integration and coordination. Their preferred approach is to

configure tall tales about quasi-Timeless, alternate universes that mimic laboratory conditions. Critical realists time a much greater number of change continua, but always in theological stories of an ontological realm symbolic of eternity (and perhaps divinity). Interpretivists also time numerous change continua, but they do so to identify the basic features of action and to achieve a provisional ordering of Time-bound experience.

These differences allow us to situate IR methodologies along the spectrum of timing and 'times' introduced in Part I (see fig. 5, p. 166; and fig. 3, p. 53 above). Recall that narrative timing device*s* respond *dynamically* to the problematic flow of Time by transforming some parts of it into a particular, narrative temporality, but if reified, these become narrative timing *metres* used to *tame* or *transcend* the problem of Time by replacing it with an *abstract* and *hypostatised 'time'* divorced from its narrative roots. The methodologies discussed in this chapter map onto this spectrum as follows:

> Neopositivism enacts a restrictive scientific metanarrative that insists on rigid methodological thematics and highly delimited creative filtering, so it would seem to fall near the upper right corner characterised by the transcend/metre/reified 'time' troika. This is also supported by the fact that neopositivists generally assume that 'time' utterances refer to Western Standard 'time', the ultimate example of a reified 'time' that signals successful, passive timing. However, neopositivists also lament the problem of Time the most, which locates them further down and to the left, nearer to the respond/ mechanism/ temporality troika and to the domain of active timing. This suggests a certain schizophrenia in neopositivism, for inasmuch as it employs a reified narrative response—complemented by Western Standard 'time'—to pre-figure its analysis of phenomena that are largely resistant to both, neopositivism seems to rest uneasily in two different realms. Therefore, we might further understand neopositivism's position on this spectrum as an *effort* to move international politics up and to the right—to reckon ruin like clockwork in hopes that international politics will become less ruinous.
>
> Critical realism enacts a less restrictive scientific metanarrative than neopositivism but still employs a rigid methodological standard for what counts as 'real' that inflects creative filtering, so it would seem to fall somewhat further down and to the left of neopositivism. Furthermore, critical realists are more open to irregularity, interference, and inconsistency in the empirical record than neopositivists, so it seems as if critical realists do not hold to an ideal of passive timing and its reified vision of

'time'. Yet critical realists still lament the problem of Time while gazing longingly in the direction of eternity, which sits well past Western Standard 'time' and even beyond the bounds of our spectrum. This indicates a different but no less schizophrenic response to international political phenomena that relies on the language of eternity to grapple with a field of inquiry that is anything but stable, orderly, or well-structured. Therefore, we can understand critical realism as an effort similar to neopositivism, except that critical realists may have to bring political phenomena *further* along this spectrum because of their quasi-eternal epistemic commitments.

Interpretivism enacts a pluralist scientific metanarrative that imposes minimal thematic standards for creative filtration delimited only by the requirements of a minimal ordering of the features of action, so it would seem to fall near the lower left corner characterised by the respond/device/particular temporality troika. This suggests that interpretivists are openly and happily engaged in ad hoc, active timing. So does their belief that explanatory narratives need not be any more generalisable than is necessary to explain the particular phenomenon in question. Yet, because interpretivists lament the problem of Time far less than the other methodologists, this pushes them up and to the right. This suggests an intriguing and fruitful relation between interpretivists' methodological flexibility and their relative lack of problems with Time. Interpretivism may imply that the only way to truly reconcile the problem of Time is to *dissolve* it by *engaging* its purportedly troubling features and standardising them as minimally as possible. This would further suggest that the way out of the problem of Time is a delicate balancing act that avoids laments but also refuses transcendent tropes.

In light of these analyses one final observation is warranted. First, in spite of the putative theory-narrative divide that safeguards real, hard-nosed, 'scientific' IR from proliferating pluralism and wanton relativism, it is interpretivist IR that exemplifies a realistic approach to studying international politics and this is due primarily to its flexible engagement with Time. By excavating quasi-timeless stories in neopositivism and a complicit theology in critical realism, this chapter suggests that those methodologies claiming the mantle of scientific facts are actually doing something more like *science fiction*. If interpretivism produces somewhat messier, less elegant, research on the variety and vicissitudes of international politics, perhaps this simply indicates that reality is indeed stranger than fiction thanks to the flow of Time. By contrast, fiction can be cleaner and less complex in just the ways that scientific approaches to

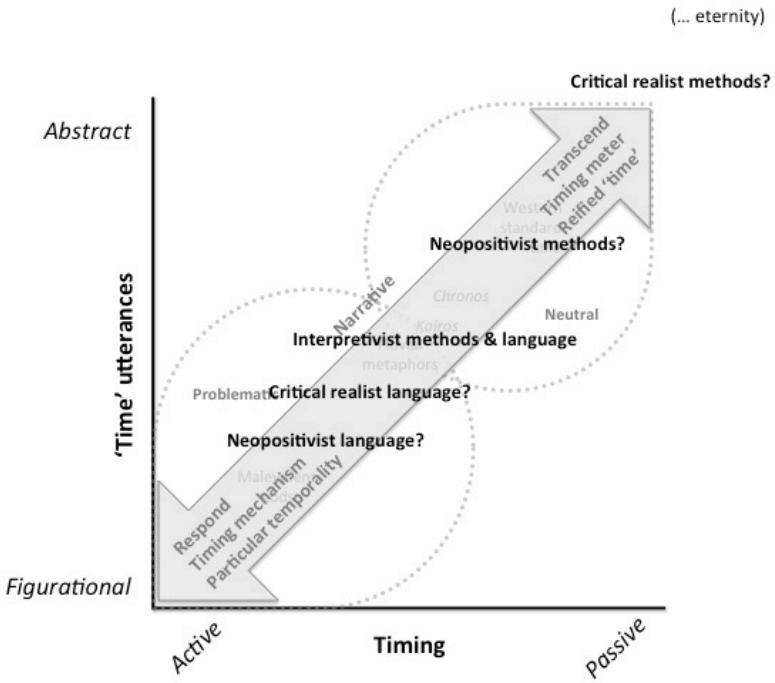

Figure 5: Narrative reasoning and the problem of Time

IR need in order to meet criteria imported from the experimental laboratory or imbued with eternalist hope. Rather than the usual interpretivist target, then, it is the 'hard' scientific methodologies in IR that benefit most from our suspension of disbelief and the idea that 'anything goes'.

Overall, it should be clear by now that in addition to defining its disciplinary identity through narrative responses to discordant changes, IR also employs narrative timing in its dominant methodologies. Not only in crisis, but also in sober reflection on *how* to reason about the phenomena of international politics, IR recommends narrative devices that help theorists grapple with the problem of Time in order *to time* international change continua. This point moves our discussion from the narrative theory of action through the processual steps by which scholars work on the puzzling aspects of international political life. Yet, one final inquiry remains to demonstrate that this dynamic runs all the way through the process of IR theorising: the question of whether IR's theoretical outputs, or finished products, also recapitulate the relationship between narrative and Time.

5
Explanatory 'times'

The cognitive order of the reading process is … closer to the experience *of time than to the notion of clock time extending uniformly from past into future.*
– Routledge Encyclopedia of Narrative Theory[1]

Introduction

The previous chapter argued that even in methodological repose, IR scholars lament the problem of Time and build narrative timing devices into their recommendations about *how* to reason about discordant phenomena. It remains to examine whether IR's 'what' is consistent with its 'how' in this respect—do actual IR *outputs*, the finished accounts of international political phenomena that result from reasoning, also recapitulate the narrative-Time relationship?[2] In this chapter I pursue this question by examining prominent *forms of explanation* in IR, the finished accounts that go into general theories of international politics or stand as self-sufficient theories in their own right. Much like chapter four, the means of timing changes in a narrative and the relationship of this process to the problem of Time provide the content of the discussion. But whereas the previous chapter located such content in the *middle* of the theoretical process where methodological recipes tell us how to get to an explanation, I now treat the *end* of the process, the explanations themselves. This presents a similar story about a different aspect of IR theorising,[3] although here I include aspects of narrative timing not covered in the previous chapter.

I scrutinise deductive-nomological, structural/rational, mechanistic, constitutive, and historical *explanatory narratives*.[4] The objective is to unpack narrative timing from different

[1] (Herman, Jahn, and Ryan 2005:610).
[2] Recognising that no account is ever absolutely finished, here I mean only published.
[3] Because the three methodological stances covered in chapter four each make possible multiple forms of explanation, I organise the explanatory forms along a time-disciplinary spectrum and try to connect each form to the pertinent methodologies.
[4] 'Explanatory' is not meant as distinct from 'understanding' (Hollis and Smith 1991), since both serve the common purpose of 'comprehension' (Ricoeur 1984:76; Suganami 2008:344–47). I treat explanations as narratives because they display the formal or structural elements of narrative (Ricoeur 1984:178; Suganami 2008:338)—they begin and end, highlight an overarching theme, and produce a smooth plot 'arc' or 'storyline'.

explanatory forms and to explore how they grapple with the vicissitudes of Time's flow in the process of composing different temporalities or visions of 'time'. By doing so, we can see that although not all IR explanatory forms try to *discipline* or *tame* the problem of Time decisively, they at least *manage* or *placate* the overall flow of Time as a condition of their viability. That is, by producing an orderly series of events or processes that renders a formerly puzzling occurrence intelligible and meaningful. they identify a different, more comprehensible, and more manageable source of the occurrence than the problematic figure of Time itself. Once again the order of presentation works from explanatory forms most opposed to the problem of Time and least openly narrativistic to those least troubled by Time's flow or narrative credentials. As in the previous chapter, I am concerned with the internal dynamics and structure of theory rather than with the (external) application or enactment of such theories by political practitioners.

My analysis of each explanatory form proceeds through three sections. First, I cover the synoptic themes that inflect each form. These differ from last chapter's thematic standards, which were general ideas that established standards of viability for the *particular* and *substantive themes* around which individual narratives are configured. Thematics delimit a range of narrative types or genres, while themes delimit the form and content of a particular instance of a genre. Second, I assess the synoptic theme's influence on creative filtration, temporal cleavage, and concordant discordance. Third, I show how these techniques concatenate to unfold an intelligible sequence in which the phenomenon makes sense.[5] This latter point constitutes one half of narrative temporality. I treated the first half (inhabitable world) in chapter four's discussion of methodological choices because they delimit the conditions under which social scientists and actors can act successfully. By discussing the second half here I follow the narratological point, introduced in chapter two, that we *first* imagine the broad features of a generally inhabitable situation; *then* we unfold specific, intelligible sequences within it that enable action.[6]

[5] Although last chapter discussed only the link between synoptic thematic and creative filtration, this chapter necessarily treats all four narrative timing devices introduced in Part I because it discusses fully formed narratives rather than the process of working toward them.

[6] Hutchings (2008) conducts a related investigation of the metanarratives implicated in political theories, focusing on how these serve to close down political possibilities in a constructed unity. I view the current chapter as both distinct and complementary to her work in that it employs a different analytical framework and focuses on the structural arrangement of story elements across explanatory forms.

Deductive-nomological ideals

Synoptic thematic: constant conjunction

Although they have proved exceedingly difficult to achieve in practice, deductive-nomological (D-N) explanations pose a social scientific ideal that exerts significant pull over neopositivist IR.[7] They take their synoptic theme from inductive inference, in which the 'idea of a necessary connexion among events arises from a number of similar instances … of the *constant conjunction* of these events' (Hume 2007:75, also 26–27 emphasis added). Where a constant conjunction holds, the thinking goes, a universal law *must* be at work: 'If the relation between [A] and [B] is invariant, *the law is absolute*. … A law is based not simply on a relation that has been found, but on one that has been found *repeatedly*. Repetition gives rise to the expectation that if I find [A] in the future, then with specified probability I will also find [B]' (Waltz 1979:1 emphasis added).[8] Although in social phenomena no events conjoin constantly and therefore none can be subsumed under an absolute law, the appeal is that inasmuch as it associates with constancy even regularity suggests some 'law-like' connection that 'covers' many instances of the events in question.[9]

A D-N explanatory narrative must present a logically sound account of the constant or quasi-constant connections between the events in question. Two basic examples of this are: 'If A, then B' (see Dessler and Owen 2005:607; Kurki 2007:38); or: 'Every event [A] is accompanied later by an event [B]' (Almond and Genco 1977:501). These are *nomological* because they express a 'basic law', and *deductive* because they express the event in question as a particular instance of a general relationship (Almond and Genco 1977:500). They are often considered causal statements if: (1) A and B are not the self-same event;[10] (2) A precedes B temporally; and (3) if A had not occurred, B would not have occurred (see Wendt 1999:79; Kurki 2007:80; Ray 2009:144). They are thought to facilitate prediction because necessary and logical connections should cover *future* instances of A and B as well (see Wendt 1999:80).[11]

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[7] D-N explanation emanates from logical positivist efforts to move beyond basic empiricism or inductivism (see Gunnell 1975), and is widely considered a non-narrative 'way of knowing' (Lake 2011:474, 466; Guzzini and Leander 2006:80).

[8] For clarity I have standardised symbols across narratives, using 'A' to indicate causal or explanatory factors and 'B' to indicate dependent variables, effects, and outcomes; although in constitutive explanation, this distinction does not always hold.

[9] Although for critics this 'adds nothing to the inadequate constant conjunction analysis of causation, except that it substitutes the term "law" for "constant conjunction"' (Papineau 2003:305).

[10] This is often mischaracterised as 'independence', although if two events were actually independent they could not be *related* by a covering law (Mackie 1980:32).

[11] Joining explanation and prediction in this way is Carl Hempel's (1948; see also Ray 2009:138) controversial 'symmetry thesis'.

For neopositivists, the charm of D-N explanations and constant conjunctions is that they *reduce* or *discipline* novelty, particularity, or other discordant occurrences. For example, James Ray (2009:137–38 emphasis added) holds that no explanation 'is deserving of serious credence' unless it can 'demonstrate that the outcome of a particular event is *merely* an example of an established pattern.' Here the synoptic theme of constant conjunction speaks to concerns of timing. It suggests an intersection of two or more change continua that, as its frequency approaches constancy, we believe indicates that they are spontaneously and reliably *integrated*. Furthermore, as its frequency increases so does its familiarity, and we are able to render it more concordant with our working beliefs about how the world works (see Kahneman 2011:61). A formalised law then seems to 'discover' relations of perfectly reliable integration and coordination in a naturally well-ordered world. The philosopher of science Karl Popper called this the 'clock model' of explanation (in Almond and Genco 1977:500), and indeed both covering laws and Western standardised time reckoning make it seem as if their users are simply tabulating the spontaneous regularity of a determinate world and that we can rely on this when it comes to coordinating our actions in the world.

Creative filtration, concordant discordance, and temporal cleavage

Now the turn in D-N explanations from 'law' to 'law-like' acknowledges that anomalies will eventually emerge that an absolute law cannot accommodate. However, both laws and law-like explanations express the synoptic ideal of a constant conjunction amenable to incontrovertible and widespread generalisation. In such conditions, analysts need only ask whether the general conditions specified by the model obtain—if they do, then the associated outcome *should* be expected because it has to or is highly likely to occur (Dessler and Owen 2005:607; Almond and Genco 1977:500). This synoptic theme informs the three other narrative timing devices.

First, the D-N explanatory narrative creatively filters out anything that might provide *a* narrative middle between A and B save the imputation of reliability that connects them. Since A marks the beginning of the story and B the conclusion, and insofar as it approaches the synoptic ideal of constant conjunction ('for *every* A, B'), we can successfully explain and anticipate B by reference to A even if numerous changes or significant Western Standard 'time' intervenes between them. In this way the sparse *theme of constant conjunction* complements neopositivism's puristic *thematic of laboratory control*: systematic and non-random elements provide ideal initial ingredients for a law-like generalisation about a quasi-constant conjunction similar to the sort that physical experiments have identified with great success.

Second, since there is no middle of the story, there is no discordant change for D-N explanations to 'put to work' driving events from the beginning to the conclusion. In effect, the only discordance rendered concordant by the explanation is B, the originally puzzling phenomenon that we seek to explain. For example, Jack Snyder's (1995) explanation of the surprising end of the Cold War has been interpreted as a D-N exemplar because the 'laws and initial conditions set forth in this account suggest that the peaceful collapse of the Soviet empire was, *while unprecedented, something to be expected*, under the circumstances' (Dessler 2003:388). Although these laws and initial conditions (the relationship between 'expansionist myths' and domestic political structures, and those structures and industrialisation) require case-specific elaboration, they still mark the beginning of a narrative—they provide sufficient detail, leave out nothing logically necessary and prior, and occur before the ending. Likewise, the end of the Cold War represents an effective, teleological conclusion by virtue of its reliable connection to the initial conditions. Thus, the D-N narrative need not refer to any events or circumstances (some of which are likely discordant) that intervened in between, and serves to render an unexpected or puzzling experience more intelligible and familiar by showing that it resulted from some factor more manageable than the overall flow of Time. Additionally, its sparse form implies that we need not worry about *how* the relationship holds in any particular instance, which further negates the importance of discordant changes subsumed by the conjoined events.[12]

Third, because it has no middle and sequesters concordant discordance at the end, a D-N explanation can cleave Time in an *extremely disproportionate* fashion—that is, it can accommodate lengthy and even discordant change continua in the briefest of stories because it need not reconcile any of their content save the end points. For instance, as long as chance, agency, coincidence, or any other 'theoretical outliers' fall *between* the initial conditions and the outcome and do not influence the consistency of that conjunction, they may be ignored or 'covered up' by the law-like generalisation.[13] Cleaving time so disproportionately permits a degree of analytic stretch between beginning and end not found in most narratives. The D-N story is a uniquely flexible and powerful example of the recursive relationship between narrative timing devices: due to its particular synoptic theme, a D-N explanation filters out significant change and therefore substantial Time, minimises discordance, and is thereby able to

[12] Dessler (2003:388) contrasts this model with a 'particularizing one, in which the researcher explains an event by detailing the *sequence of happenings* leading up to it.'

[13] On the omission of these outliers in scientific explanations, see (Suganami 1999:370–71, 2008:340).

carve out a broad swath of experience—most of which is bound together in absentia, to the spoliation of any intervening changes.

Unfolding an intelligible sequence

By invoking a necessary connection between its two elements, the D-N model unfolds an *absolute* and *unirectilinear* succession applicable to chronologically near or distant events (see fig. 6, p. 173). A leads exclusively (uni-) and without deviation (recti-) to B. This is evident in the sparse formulation of the D-N narrative. Because 'A entails B', all the relevant details in a very short story arc represent an exceedingly well-ordered and therefore intelligible system imbued with a 'necessary consequences', or a 'predetermined order of succession',[14] which seems more absolute as the explanation describes a more reliable or constant conjunction.

We might even say that the D-N form unfolds a 'point-like' or *quasi-punctual* sequence, since it potentially subsumes vast stretches of Western Standard 'time' or numerous changes in its absent middle. 'If A, then B' easily gives the impression the B *immediately* follows A. Punctuality connotes both a 'precise' and 'finite point' with no extension and the 'precise observance of a rule', both of which comport well with the D-N ideal in that as events become shorter and shorter or more 'microscopic', the laws that cover them become '"correspondingly more certain"' (George and Bennett 2004:228).[15] Notably for our purposes, 'punctual' also indicates the quality of being 'exactly or aptly timed'.[16] Taken together, these remarks bring the scientific appeal of the D-N explanatory form into sharp relief: by configuring experiences with reference to the synoptic theme of constant conjunction, by creatively filtering nearly everything save the beginning and end of the story and thereby eliminating almost all discordance, and by cleaving vast stretches of Time, a D-N explanation produces an intelligible sequence that is absolute, unirectilinear, quasi-punctual and therefore seemingly certain. These features make it imminently hospitable to neopositivists' standards of laboratory control.

Inasmuch as it configures spare, elegant relations of perfect integration and coordination, the D-N narrative is an attempt at timing excellence reminiscent of the clock by which

[14] (Entail, N. 2012, Entail, V. 2012).

[15] Although for some (Fearon 1995), this relationship suggests that the D-N form is feasible only for phenomena—e.g. the *immediate* run-up to war—that are too brief to helpfully illuminate the causal dynamics of large-scaled phenomena.

[16] (Punctual, Adj. and N. 2013, Punctuality, N. 2013).

Popper symbolised it.[17] And inasmuch as this vision reflects social scientists' hopes of a deterministic and therefore predictable world beyond the conjunction in question, the D-N explanation would stand as perhaps the ultimate example of narrative's potential to *tame* Time,[18] except that there have been *no constant conjunctions* identified in international politics and the *few regular or reliable conjunctions* are matters of open debate (see Patomäki 2002:134).[19] D-N explanations are thus the elusive darlings of neopositivism—dear because they promise not merely to explain a phenomenon but to unfold a realm untrammelled by the problem of Time; elusive because they have proven nearly impossible to locate in the Time-bound realm of international politics (Almond and Genco 1977:502; see George and Bennett 2004:133; Hudson 2005:13; Barnett 2011:158).[20]

D-N explanatory forms
If A, then B.

$A_1 \ldots A_n$, therefore B.

In a given situation meeting certain criteria $A_{1\ldots n}$,
a specific outcome B is to be expected.

Narrative timing devices

Synoptic theme:	constant conjunction
Creative filtration:	severe, A & B must be independent events
Temporal cleaving:	highly flexible, highly disproportionate
Concordant discordance:	vacant middle

Intelligible sequence
Absolute, unirectilinear succession; quasi-punctual; ($\lim\tau \rightarrow 0$)

Figure 6: Deductive-nomological explanations

[17] Relatedly, Hempel (1965:351; see also Dessler 2003:402) notes that the D-N model refers to a world that is 'deterministic in the sense that, given the state of that system at any one time, they determine its state at any other, earlier or later, time.'

[18] Almond and Genco (1977:502) further contend that this elusive quest denies the possibility of freedom.

[19] Additionally, IR has encountered grave difficulties generating accurate point predictions (see Jervis 1998:4, 18, 30; Gilpin 1981:47).

[20] For example: 'The absence of war between democracies comes *as close as anything* we have to an *empirical* law in international relations' (Levy 1989:88), yet this phenomenon still awaits a law-like or causal explanation that passes systematic empirical testing and gains widespread assent (Levy 1989:88; Owen 1994; Russett, Layne, Spiro, and Doyle 1995; Kydd 2004:356–59; Sprinz and Wolinsky-Nahmias 2004a:374; Gartzke 2007; Bittick 2008; cf. Kacowicz 2004:109–110). Perhaps because a D-N or covering law explanation is such a rare gem, recent IR methods surveys decline to cover it, except as an object of critique (e.g. George and Bennett 2004; Sprinz and Wolinsky-Nahmias 2004c; Jackson 2011).

Structural / rational narratives

Synoptic thematic: situational logic

In addition to their extreme rarity, D-N narratives tell a fairly impoverished tale. This is because they decline to show, 'step by step, … how a given event or condition sets in motion a sequence that regularly culminates in a given outcome' (Singer 1989:13). Consequently, IR and the social sciences almost always fill in this missing narrative middle with an intermediate act.

A particularly popular filler is situational logic, which connects the *structure* of initial conditions to outcomes through the assumption of *rationality* (Dessler and Owen 2005:598). Structural/rational (S/R)[21] narratives explicate phenomena '"in terms of a deductive schema which contains the agent's preferences, goals and objectives, an analysis of his situation, and the general assumption that agents behave adequately or appropriately to the situation"' (Dessler and Owen 2005:598). By emphasising a single or highly constrained number of effective responses based on situational logic, they explain 'how a particular input produces a given output because of the arrangement of things in which the process takes place' (Suganami 2008:334). They are thus both structural and rational inasmuch as the behaviour of interest is both rationally deducible *and* driven by the situation. Furthermore, precisely because logic is composed of eternal, universal connections, it is fungible—anyone anywhere at any moment can deduce rational choices and their expected outcomes.

Although it fills in the middle of the story, an S/R narrative comports with the D-N ideal because it retains the possibility of if-then generalisations (Dessler and Owen 2005:598). Furthermore, its logical filler invokes scientific ideals of regularity, necessity, and 'timeless' applicability (Linklater and Suganami 2006:66; Green and Shapiro 1996:x). As in the D-N ideal, the point is to render a discordant phenomenon predictable: 'we need an if-then generalization establishing a *recurrent* linkage between the conditions of action and the behavior that follows or accompanies those conditions' so that 'we can show that the observed behavior is *just what we should have expected*' (Dessler and Owen 2005:607 emphasis added). In an S/R narrative, this recurrence suggests that, in addition to a (near-) constant empirical conjunction, there must be some element of universally valid logic causing A and B

[21] Although structure and rationality are different in kind and so somewhat strange bedfellows, I combine them because they go together quite frequently in IR's discussions about state behavior under anarchic structural conditions (e.g. Baldwin 1993; Glaser 2010:3).

to adhere together with great regularity.[22] So although S/R narratives do not take the sparsely determinate form of D-N narratives, they remain 'implicitly' determinist because their middles are full of exclusively logical connections (Dessler and Owen 2005:607).

S/R explanations therefore express timing concerns similar to D-N variants. They identify exceedingly stable conjunctions or relations of integration and coordination that, proponents have often insisted (Dessler and Owen 2005:607), are spontaneous in the sense that they require little interpretation or mediation by social actors. However, this non-agential understanding of spontaneity is difficult to sustain, since situational logic depends on actors *understanding* the relationship between their interests or preferences, the situation in which they find themselves, and how to rationally calculate and enact an optimal outcome. Inasmuch as situational logic 'characterizes' states and their environment (Glaser 2010:24), S/R explanations actually need the narrative theory of action. Their primary actors are engaged in efforts to coordinate their actions with an environmental change continuum against the standard of rationality. In other words, S/R explanations tell stories about situation-specific rational timing.

Unlike the D-N ideal, there is no shortage of S/R narratives in IR.[23] Kenneth Waltz's (1959:231–238) well-known neorealist variant posits that if we want to assess the importance or predict the *general* results of states' behaviours, we must focus on the structural conditions that constrain them. Structural conditions are composed of 'relations of coordination' between states of varying capabilities that when 'differently juxtaposed and combined behave differently and in interacting produce different outcomes' (Waltz 1979:81). Because the international system is primarily anarchic (its coordinated relations are non-hierarchical), self-help is the rule that 'indicates the expected outcome: namely, the formation of balances of power' (Waltz 1979:107, 118). Although Waltz (e.g. 1979:118, cf. 76) sporadically tries to eschew a rationality requirement, this narrative relies on the idea that self-help is a logical response to anarchy, and that the implications of this is power balancing in general. Waltz thus presents a beginning (unitary, security-seeking actors under anarchy), middle (situational logic of self-help), and end (power balancing) that together explain competitive international

[22] This distinction between S/R and D-N is fuzzy, as evidenced by Kurki's (2007:50; see also Wendt 1999:79) observation that 'the regularity theory in the DN-model form also entails the assumption of logical necessity and regularity-determinism'.

[23] In addition to the neopositivist examples provided, critical and scientific realists embrace structural explanation (see Wendt 1999; Wight 2006; Kurki 2007:230, 255–57), although this has much more to do with their general *thematic* conflation of *stability* with *depth* and *ontology* than with the metaphorical referent. Indeed, it often seems as if almost anything can count as a structural component in a critical realist account.

behaviour.[24] Neoliberal alternatives to neorealism also begin with anarchy but derive a different outcome via rationality, ending with cooperation instead of (or in addition to) competition (see Oye 1985). Although tit-for-tat reciprocity (Axelrod 1984), regimes (Stein 1982; Young 1982), or international institutions (Keohane 2005) clearly differ from neorealist outcomes, the narrative structure of the explanation has not changed.[25] Anarchy is still the beginning, but based on the expanded assumption that under anarchy it is rational to prioritise security *and* other basic goals that have relative costs and gains, neoliberals reach conclusions other than competitive power balancing.

Creative filtration and temporal cleavage for concordant discordance

Although the presence of purely self-help or competitive/cooperative middle acts distinguishes S/R from D-N narratives, situational logic exerts a similar influence on their form as constant conjunctions do over the D-N form. Because they view situational logic as deductively founded and therefore generalisable and predictable, S/R explainers must filter, cleave, or render concordant any aspects that might oppose the regular movement from situational beginnings to behavioural outcomes. More specifically, they filter important from unimportant information, cleave Time so as to exogenise different preferences between actors (which must also be demonstrably rational), and/or link non-rational outcomes to errors in execution or limited knowledge, known as 'imperfect rationality'.

Because S/R explanations include substantive middles their creative filtration is less severe than the D-N ideal, which brooks nothing between its beginning and end. But it is still quite restrictive due to situational logic's links to regularity and predictability. In the examples above, intervening, rational calculations 'process' the implications of systemic anarchy in a way that *reliably* concludes in either competitive balancing or cooperation. Thus, only rational elements are eligible for emplotment. Waltz's (1986:329) well-known insistence that neorealism does not explain everything or even many things, but rather only the most important things provides a normative buttress to this creative filtration—rational elements are

[24] Notably, Dessler and Owen (2005:607) view Waltz's structural narrative in almost D-N terms: 'This is an if-then generalization that associates bipolarity with stability inducing behavior. … bipolarity has one and just one effect on action, namely to promote a stable system of interaction.'

[25] Waltz and Keohane both ignore or deny the narrative quality of their theories. Waltz (1979:72) uses 'story' in a way that supports its distinction from theory, while Keohane (2005:177) is a bit more ambiguous. By contrast, Axelrod (1984:20–21) purposefully presents a '*chronological story* of cooperation' that respects S/R strictures by hinging on the reliability of the middle to hold the beginning and ending together. It is also worth noting that, once fully elaborated, this narrative is treated simply as a 'chronology of cooperation', which implies that whatever 'timeline' it unfolds has a logical rather than narrative basis (Axelrod 1984:55–72).

filtered in as most important, while non-rational elements are filtered out with other less important elements such as particular outcomes and individual states' foreign policies.

S/R narratives cleave Time somewhat more proportionately than D-N models because a substantive middle entails at least one more step that must be coherently emplotted to get from the beginning to the end. However, the regularity of situational logic affords S/R explanations considerable leeway when it comes to the extent of change they can subsume under the situational-logical story. In Waltz (1986:330–31), the 'assumption of rationality' works through a 'process of selection' and emulation that moves faster or slower by rewards and penalties that actors impose on each other.[26] So although the assumption of rationality has a significant logical component, Waltz (1986:330–31, 1979:76) also admits that '[e]ven though constrained by a system's structure, a unit can behave as it pleases', although it then faces consequences that might 'select it out' of the system and re-imbue that system with the stability regulated 'by the "rationality" of the more successful competitors'. In an S/R formulation, these lengthy selection processes get subsumed under the brief, elegant exposition of situational, logical behaviour. In neorealism, complex processes of pushing and pulling, calculating and behaving, and reward and punishment (including death) are encompassed by words like 'promotes' in explanations like 'bipolarity promotes system stability' or 'anarchy promotes balances of power'. These explanations can thereby cleave extensive amounts of change without proportionate extensions of the narrative form.

In addition to subsuming lengthy change continua under regular logic, S/R narrators also cleave Time for a more tactical purpose. Their beginnings often split change continua in such a way that situational particulars along with actors' identities, preferences, and interests, are treated as exogenous to the story. These variations are simply part of the S/R explanation's tacit, antecedent developments and are thus kept from hindering the sense of generality and reliability demanded by the theme of situational logic. For example, discussing state action under anarchy as most S/R explanations do propounds a distinctly modern account of autonomous actors in a univalent situation. It would be more difficult to offer S/R accounts of early or pre-modern kingdoms, fiefdoms, empires, or religious entities acting under conditions of crosscutting obligations and loyalties that would raise the questions either of *which* situation the logic should fit, which logic should be applied to the situation(s), or both. Any story must begin somewhere, but by choosing to begin after situations and actor identities and

[26] Curiously, Waltz (1986:330–31, 1979:118) views this as both a justification for assuming rationality and as evidence that his account 'requires no assumptions of rationality' because 'if some do relatively well, others will emulate them or fall by the wayside'.

preferences have emerged (Glaser 2010:2, 23; see Ringmar 1996:39), S/R narratives avoid much potential variation and thereby keep the plot elegant and reliable—as logic entails—but also flexible enough to explain different outcomes by reference to a single theme.

In support of the situational-logical theme, these techniques help S/R narratives enrich the D-N template by providing a substantive middle act.[27] But thanks to clever cleaving and filtering, S/R forms still admit very little discordance. By definition, well-specified logic should not change, so the glue that bonds the situation to its outcome renders some discordant event as a regular and expectable outcome of structure and rationality. Yet, despite this formal achievement, in practice S/R explainers often confront significant deviations in middles and endings that share common beginnings. Political actors pursue manifestly non-rational courses of action; power balancing or cooperation do not always occur, or in some cases occur in spite of non-rational decision making.[28] This discordant empirical record threatens their elegant means of situating puzzling changes as predictable outcomes of logical processes, so proponents must re-secure the S/R narrative in one way or another.

For example, explainers add normative elements to the story or contextualising it within an academic division of labour. In the first instance, Glaser (2010:2, 3) 'analyzes the strategies a state *should* choose' and thus 'provides a rational baseline against which actual state behaviour can be evaluated'. And James Fearon (1995:409) notes, 'I am not saying that explanations for war based on irrationality or "pathological" domestic politics are less empirically relevant. … but we cannot say how so or in what measure if we have not clearly specified the causal mechanisms making for war in the "ideal" case of rational unitary states.' Thus, when rationality's conceptual antithesis (irrationality) or the international system's analytical subordinate (domestic politics)—both of which had been filtered out of S/R explanations—impinge upon the regularity of outcomes, S/R explanation switches from scientific-explanatory to normative and situational logic becomes more like an interpretivist ideal type that provides *guidelines for action* than the deductive glue that holds a neopositivist story together.[29] It now seems as if situational logic is not as fungible as it should be, given that actors are not locating rational pathways and calculating expected results with enough accuracy. This breakdown in rationality in turn undercuts the neopositivist subject-object dichotomy

[27] Furthermore, S/R explanations also emphasise *actors* in a *situation* (Waltz 1979; Baldwin 1993; Glaser 2010), neither of which are necessary in a D-N story.

[28] E.g. (Kennan 1978; Waltz 1986:330; Morgenthau 1993:7, 45; which are discussed in Crawford 2000).

[29] Jackson (2011:112–14) contends that Waltz was always an interpretivist of sorts (more precisely, an 'analyticist'), so the use of ideal types is not surprising. However, most of the field took Waltz for a neopositivist, so this transformation within S/R explanation remains significant.

and leaves S/R narrators reliant the narrative theory of action, which understands theory (and indeed all narratives) as providing resources to actors. After all, if the subject-object dichotomy holds, deductive logic is not fungible, *and* S/R narratives only provide ideal types, it is hard to see how the S/R narrator's vision of rationality and its expected outcomes can take root in the minds of the story's actors.

In the second instance, S/R explainers also rely on 'a subsequent layer [of theory] that explains divergences from the rational baseline' (Glaser 2010:205, 15). For example, Waltz (1986:329) leaves the 'residual variance' in outcomes associated with non-rational (and unimportant) processes to theories of domestic politics or foreign policy. This effectively exports S/R creative filtration to the academic division of labour and further insulates them from discordant outcomes. Irregularity is for other theorists, so the S/R explanatory form remains elegant, reliable, and exculpable.[30]

Unfolding an intelligible sequence

S/R narratives fill their middle acts with rational, logical content and so produce a very orderly and intelligible sequence that—although it loses any sense of immediacy or punctuality—retains the D-N vision of *unirectilinear* succession (see fig. 7, page 180). Because it does not change, situational logic is a metaphor for eternity and a 'string in the labyrinth, enabling us to make sense of many twists, turns and complexities in an essentially [unirecti]linear fashion' (Hutchings 2008:95; Ricoeur 1988:194; Dessler and Owen 2005:599). This is the cash value of the S/R form's 'implicit determinism'—although it allows much more into the story than the D-N template, it still unfolds a sequence in which given conditions have singular and *inevitable* effects (see Dessler and Owen 2005:607). As such, S/R narrative temporality remains largely inhabitable to neopositivists, who desire conditions as close to the laboratory as possible.

Yet despite a temporal vision that shares much with the D-N template, S/R narratives exemplify a Faustian bargain made by all explanatory forms *other* than D-N. As soon as they include a middle act and/or greater empirical detail, explanatory narratives necessarily grapple with more discordance than the D-N template, which tames Time mostly by denying its effects altogether. In the case of S/R explanations, theorists want deductive rationality to act

[30] Unlike Waltz, Glaser (2010:24, 26n21) tries to include unit variables, a theory of foreign policy, and a broad menu of strategic options available to states. This is consistent with other S/R efforts that work towards richer explanations that can accommodate deviation by including, among other things, offensive or defensive strategies (Snyder 1991; Mearsheimer 2001; Taliaferro 2001), bandwagoning (Schweller 1994), or threats (Walt 1987).

as scientific glue that binds structural beginnings to regular endings. Unfortunately, just where they need logical adhesive, many S/R explainers grapple instead with non-rational or otherwise discordant behaviour on the part of political actors. Therefore, they must creatively filter confounding information as non-rational and irrelevant or reconceptualise the S/R model as a normative ideal type, which takes it some distance from neopositivism. In both cases, S/R narrative's quasi-eternal theme prevents specific predictions and even explanations of particular, concrete episodes, which require richer and more flexible narrative pathways than situational logic can accommodate (see Ringmar 1996:39, 66; Humphreys 2011:257).

S/R explanatory forms
If A (+ situational logic), then B.

If a given situation A obtains, rational actors can be expected to produce a specific outcome B.

If A and rationality obtain, then B.

Narrative timing devices

Synoptic theme:	situational logic
Creative filtration:	A & B must be independent and rational events
Temporal cleaving:	flexible, disproportionate
Concordant discordance:	none (logic), normative ideal type, division of labour

Intelligible sequence
Unirectilinear succession

Figure 7: Structural / rationalist explanations

Mechanistic explanations

Synoptic theme: mechanical metaphor

Mechanistic explanations in IR render some part of the world more intelligible by elucidating a *concrete* pathway along which events or processes regularly travel.[31] A mechanistic narrative explains how the connection between two things works in nearly automatic fashion by reference to its eponymous synoptic theme. 'Mechanism' invokes a 'relatively "routinised" or enduring causal process' (Kurki 2007:234 n113) through a 'narrative representation of the

[31] At present, IR theorists employ mechanistic middles in explanations with such frequency that it is possible to identify 'mechanistic' with proper 'explanatory' and 'theoretical' explanation (Suganami 2008:347; see also Jackson and Nexon 2002; Wohlforth 2012:221; Bennett 2013).

way a segment of the world appears to us to proceed *when left to its own device*' (Suganami 1999:370 emphasis added). The mechanism theme dictates that the story present a series of steps that compose a machine-like process of transition, *triggered* by something and ending regularly in a given outcome through the operation of *deterministic forces* rather than intentional acts or chance occurrences (Gilpin 1981:49; Vasquez 1987:141–42). Although this obviously shares much with D-N and S/R stories' emphasis on consistency and expectability, there are two key differences. First, mechanistic stories include a more substantial middle because elucidating machine-like dynamics requires more detail than their 'If A (+ situational logic), then B' forms allow (see Bhaskar 2008:69). Second, the standardising theme of a machine is distinctly *human* rather than some abstract and quasi-eternal idea like constancy or logic.

Fearon's (1995) revision of S/R explanations for war provides a neopositivist example of mechanistic explanation. He finds that several S/R stories do not explain why leaders are *prevented* from bargaining or communicating to avoid unwanted wars; and proposes three additional intervening variables in the form of 'general mechanisms, or causal logics', including private information and incentives to misrepresent capabilities, commitment problems that confound mutually agreeable solutions, and issue indivisibilities (Fearon 1995:381–82, 409; cf. Kurki 2007:233). Consistent with the quality of regularity that the mechanistic theme evokes, Fearon highlights systematic and stable attributes in each. For instance, it is *not* that misinformation or miscalculation randomly prevents peaceful solutions; rather leaders have stable incentives to misrepresent based on their strategic positioning and political objectives (Fearon 1995:381). Fearon's mechanisms thus rescue the apparently irrational, pathological tendency of leaders to misrepresent their material capabilities by showing that such behaviour is regular and to be expected if certain strategic and political conditions trigger it. More generally, he adds needed empirical detail to inadequate S/R explanations in a way that keeps the story amenable to the neopositivist metanarrative of experimental control over deterministic phenomena.

Critical realists and interpretivists also use mechanistic explanations, albeit for different purposes. For interpretivists, 'mechanism' is the theme of an ideal type, which is used solely to render some phenomenon more intelligible by comparison (see Jackson 2011:155, 199). Within the interpretivist thematic of provisional knowledge, a mechanistic theme is a useful way to get some temporary traction on the way the world works, which may very well turn out to be non-mechanically. For critical realists, a mechanism is a causal entity because it 'pushes and pulls' other entities and structures toward some manifest outcome (Kurki

2007:233). Although they need not meet such strict standards of regularity and generality as neopositivists, critical realist variants must still be 'relatively stable' and even 'lawful' concrete processes in order to satisfy the thematic standard of 'deep' and 'ontological' entities 'underlying' experience (Kurki 2007:233; Wight 2006:32).[32]

Creative filtration, temporal cleaving, and concordant discordance

Mechanistic narratives can include a more substantial, detailed, and particular middle act than either D-N or S/R stories because the mechanistic theme requires only *some* sort of regularity rather than the specific sorts dictated by *constant* conjunctions and *logical* connections. Yet however more open, the regularity standard still requires significant creative filtration of a multitude of possible elements. Relevant details must contribute to the 'matter of course', the sense that the middle works 'by its own device' (see Suganami 2008:335), so much as a literal mechanism must be sealed off from things that might interfere with its *normal operation*, a mechanistic story filters 'in' only relatively stable, regular, and even determinate details and filters 'out' information that interferes with their *normal configuration*. As further evidence that this standard of filtration overlaps significantly with those found in D-N and S/R stories, a mechanistic explanation includes information that contributes to its sense of 'blind necessity' but excludes 'purposive' and deliberate actions (Suganami 2008:336). This is why D-N and S/R explainers can embrace mechanistic explanations quite readily—it represents a modification that increases empirical richness while also searching out new sources or forms of regular connections between events.[33]

As long as the standard of regularity is met, a mechanistic story can cleave Time in large or small portions. However, unlike D-N and S/R accounts, greater detail in the middle requires that mechanistic narratives be more proportionate to their temporal cleavages—the lengthier continua of change they treat, the more involved will be the story that shows how they integrate and coordinate regularly to produce an expectable outcome. As George and Bennett (2004:140) describe it, 'explanation via causal mechanisms involves a commitment in principle to making our explanations and models consistent with the most *continuous* spatial-temporal sequences we can describe at the *finest level of detail* that we can observe.' Proportionate temporal cleavage thus crosses a threshold in IR explanations, from highly formal-

[32] By attaching such import to regularity, critical realism overlaps with neopositivism and risks reducing mechanisms to little more than 'intervening variables' or 'micro-level theories' for filling in the gaps between correlated entities (Caporaso 2009:79; Jackson 2011:109–10; see also Guzzini 2011:332; cf. George and Bennett 2004:137, 140).

[33] As Fearon's example shows, S/R explanations especially conduce to mechanistic modification. After all, logic is a machine that *never* breaks down.

ised accounts that can cover large swaths of Time in a brief story to more obviously narrative accounts that proceed step-by-step from beginning to end. Although, we might note that they cross *just* over that threshold, for when compared with the co-constitutive and historical variants that follow, mechanistic stories still 'jump' across certain connections that, if regular and un-puzzling, require no further explication. So although their temporal cleavages are more proportionate than some explanations, mechanistic accounts remain less proportionate than others.

Mechanistic explanation differs further from the previous two forms because it does not shirk discord in the middle. Instead, it produces concordant discordance. Whatever fills the narrative middle must contribute to a steady 'turning of the gears', and these processes must transform a surprising or puzzling event into a regular outcome. One especially ingenious way in which mechanistic narratives employ concordant discordance is to include within the larger mechanisms specific, empirical mechanisms, which act as 'fail-safes' to re-direct course of events back to its normal path when discordant happenings threaten to throw the process off track. For example, Fearon's (Fearon 1995:380–81, 400; see also Guzzini 2011:332) three mechanisms all provide specific and reliable ways in which even leaders who desire peace will be re-directed to the path leading to war, which is precisely where many of the S/R explanations he improves upon ended up in the first place.[34]

Unfolding an intelligible sequence

Unlike the narratives covered so far, a mechanistic explanation is neither uni- nor recti-linear. Inasmuch as the metaphor that connects beginning and end evokes mechanical images and processes not easily described by a straight line unless we 'black-box' the mechanism itself, and thus vitiate much of the point of configuring this type of explanation instead of another. And as Fearon's example illustrated—the idea of fail-safes depends on multiple pathways by which the normal course of events can be restored. However, all the *multi*linear action occurs within the mechanism itself and serves to ensure similar outcomes. Therefore, although there are multiple courses and course-corrections not found in the previous forms, a mechanistic explanation still manages to unfold a highly *reliable*—if not absolute—sequence between beginning and ending (see fig. 8, p. 185).

This turn from unirectilinear constancy to multilinear reliability highlights a trade-off of sorts. The idea of a machine with multiple pathways allows a mechanistic story to accom-

[34] Inasmuch as each of these mechanisms is sufficient to produce an unwanted war, Fearon's mechanistic story includes three fail-safes. For an earlier example, see (Gilpin 1981:209, 22–23).

modate a greater quantity of empirical detail and thus to establish a more plausible 'arc' between its endpoints because each step requires less of a leap than D-N or S/R plots (see Lebow 2010). [35] Greater plausibility in turn lends a sense of *higher probability* (see Kahneman 2011:159–60), so even as it contradicts the spare, elegant forms of D-N and S/R explanations, the mechanistic story retains some quality of *reliability*. This is crucial to its viability as a social scientific explanation in all three of our IR methodologies. Neopositivists find in a successful mechanistic explanation enough consistency and determinism to enable generalisation, prediction, and control; critical realists enough stability to contribute to the elaboration of a deep ontological structure; and interpretivists a richer and more useful ideal typification of experience.

However, reliability is not the same as the constancy or absolute succession propounded by D-N and S/R stories, respectively. The mechanistic story's more proportionate temporal cleaving and comparatively looser filtration acknowledge the fact that a *reliable machine* includes many components, but in a mechanistically themed account the narrator must then show that each of these is consistent enough to ensure the reliability of the whole process (George and Bennett 2004:30). Furthermore, because it takes a human creation as its inspiration instead of quasi-eternal metaphors like constancy and universal logic, the mechanistic theme has *intrinsic* contingency, since mechanisms break down from time to time or falter due to interference. Unlike the other IR theoretical narratives surveyed so far, some vulnerability is *built-in* to the explanatory form. Although *in practice* D-N and S/R forms confront significant amounts of discordance, *in form* they brook none. The mechanistic narrative encounters discordance in both, even if overall it remains heavily tilted toward concord and regularity.

For neopositivist this tension may signal the abandonment of hope for social phenomena that are spontaneous, determinate, *and* highly consistent. Critical realists are less troubled by it because their overall explanatory project *relies* on interference along the path from deep reality to shallow experience. And interpretivists are unperturbed because the possibility of interference marks an opportunity to elucidate experience by comparing it with the reliable, ideal type. In any case, mechanistic narratives cross a significant threshold when they use a human creation as their synoptic theme and thereby unfold a 'merely' *reliable* and partially *multilinear* series instead of an absolute, unirectilinear, and perhaps quasi-punctual succession.

[35] In good mechanistic idiom, we might say that they have 'tighter tolerances' than D-N or S/R stories.

Mechanistic explanatory forms
If a given situation A, triggers a mechanism AB (and nothing else interferes), then a specific outcome B is to be expected.

If A and only AB, then B.

A, then AB, then B.

Narrative timing devices

Synoptic theme:	mechanical metaphor
Creative filtration:	A & B usually independent, elements are highly regular
Temporal cleaving:	flexible, somewhat proportionate
Concordant discordance:	mechanistic regularity, multiple pathways & failsafes

Intelligible sequence
Multilinear reliability

Figure 8: Mechanistic explanations

Constitutive narratives

Synoptic themes: (mutual) implication

Constitutive narrative is a more recent addition to the IR stable of explanatory forms and a staple of interpretivist research, especially constructivism (Checkel 2008b:125).[36] Constitutive explanation is concerned with how entities come into being and/or how they are put together (see Jackson 2011:104). The former emphasises *processes* of constitution, while the latter focuses on the *conceptual* elaboration of the entity (Jackson 2011:106), although in both cases proponents view this as a way to 'unpack' IR's presumptive concrete objects and to highlight their contingent qualities. As such, constitutive explanation marks a departure of varying degrees from the explanatory forms discussed above. The *process-* / *concept-* distinction holds as well in the sub-variant of *co*-constitutive explanation, which shows how two or more entities are implicated in each other's emergence or existence, respectively. Although I build from constitutive explanation in general and return to it at certain points, this section focuses primarily on co-constitution because it presents a more distinctive narrative departure from those we have already examined.

[36] Although constructivists and interpretivists more broadly are no strangers to other forms of explanation—for S/R, see (Katzenstein 1996; Pouliot 2007); for mechanistic, (Guzzini 2011); for historical, see (Hall 1999). Likewise, IR postmodernists and post-structuralists employ constitutive explanation as well (see Wendt 1999:91), which is no surprise, given that Michel Foucault (1972:47–48) viewed it as a way to define objects 'without reference to the ground, the foundation of things, but by relating them to the body of rules that enable them to form as objects of a discourse and thus constitute the conditions of their historical appearance.'

The synoptic theme of *constitutive* explanations is that some entity or factor is *implicated* in the constitution of the entity or event in question as the way it is instead of other ways it might have been (Jackson 2011:106). An example of process-constitution is David Campbell's (1998:4); belief that 'social and political life comprises a set of practices in which things are constituted in the process of dealing with them'. An example of concept-constitution is Roxanne Doty's (1996:3) claim that 'representational practices that have constructed the "third world" have simultaneously constructed the "first world"'.

In a slight but significant adjustment, the synoptic theme of *co-constitutive* explanations is that two or more entities or processes are *mutually implicated* in each other's emergence and operation. An example of process-co-constitution is: 'social institutions are the result of the co-constitution of subjectivity and community by means of practice and discourse' (Adler 2005:5; similarly, Koslowski and Kratochwil 1994:216; Onuf 2012:36). This form emphasises a *recursive* or 'back and forth' (Behnke 2006:64–65) process that produces *both* subject and community. Two well-known examples of concept-co-constitution are: 'sovereignty and anarchy [are] inextricably associated with, and mutually constitutive of, each other' (Schmidt 2002:12); and'[r]ather than granting ontological priority to either structure or agency, constructivists view both as "mutually constituted"' (Klotz and Lynch 2007:3; also Adler 1997). This form emphasises how two entities are implicated with each other '*by definition*' (Wendt 1998:106).

Creative filtration, temporal cleavage, and concordant discordance

The theme of implication allows for more relaxed narrative timing than that found in the previous explanatory forms, while *mutual* implication marks an outright departure. Creative filtration using either theme is quite permissive because a potential story element need only *affect* the entity or entities in question, rather than meeting logical, systematic, or stable standards as found in the other forms. Process-constitutive explainers in particular can include almost anything in the story so long as it contributes to the emergence of the entity, while concept-constitutive explainers may filter 'in' only the *necessary* features of the entity (Wendt 1998:105). In either case, in filtering more permissively constitutive explanation shares much with 'thick description' or 'barefoot empiricism' (Ruggie 1998b:867; also Hopf 1998:198).

This holds implications for the way that constitutive explanations cleave Time and render discordance concordant. Because they do not provide a stringent rubric for eliminating information—as situational logic does—or for skipping the middle altogether—as a constant conjunctive theme does, constitutive explanations must cleave Time more proportionately

than the other forms, with the possible exception of mechanical. That is to say, they can emplot lengthy or brief relations of change continua, but the length or brevity of the continua is reflected in the lengthy or brevity of the explanation itself. By contrast, D-N explanations treat lengthy changes as quasi-punctual, S/R subsume them under logical connections, and mechanistic render them highly reliable. In particular it is impossible for a co-constitutive explanation to restrict the explanatory form to 'If A, (and situational logic or mechanism,) then B', since both entities are conditions of possibility of the other. Co-constitutive explanations cannot 'jump' forward in any of the senses just mentioned because mutual implication dictates more (and more unique in process-co-constitutive cases) steps than the other forms. A co-constitutive explanation at minimum proceeds: 'If A, and B, and A conditions B and B conditions A, then AB.' Looser creative filtration, in this case, increases the work of emplotment.

Additionally, constitutive beginnings are less easily specified than the forms discussed so far, since proponents hold that 'we live in a world where "nothing comes from nothing"' (Kurki 2007:16). Some constitutive explainers understand this as a call to treat 'the independent variable in a causal study as the dependent variable in a constitutive one' (Klotz 2008:50). This is a significant departure from the previous formats, which treat actors and/or situations as given, autonomous entities simply 'there' at the opening of the plot and therefore elide questions about how they came to be the way that they are.[37] It is also a consequence of selecting a synoptic theme with less standardising power than the other forms, which specify more stringently what can and cannot go into a given explanation.

Finally, because the synoptic theme is more permissive, discordant events need not be rendered systematic, logical, or even reliable in a constitutive narrative; they must simply condition the entity or entities in question in some intelligible way.[38] Those entities in turn become less puzzling, so the thinking goes, once we elaborate their component parts or their processual development. In concept-constitutive stories, thick description renders a discordant event concordant. In process-constitutive stories one thing leads (back) to another until the conclusion makes sense in terms of the overarching plot.[39]

[37] For example, constitutive explanations can challenge both neorealist and neoliberal assumptions of rational actors under anarchy (Onuf 1998:60–61, 2012:264–70).

[38] One example is Rodney Hall's (1999:133) argument that an emerging American collective identity challenged British claims to colonial sovereignty and thus touched off a crisis of legitimacy in the international system. American collective identity was fluid and highly contingent, yet it played a key role in changing the mode of international organisation from territorial- to national-sovereign.

[39] Critical realists (Kurki 2007:241, 301; Wight 2006) are often sceptical about the distinction between constitutive and causal theorising because they consider 'conditioning' power to be causative. Wendt's

Unfolding intelligible sequences

Unlike D-N, S/R, and mechanistic stories, constitutive narratives unfold two distinctly different intelligible sequences, depending on whether they are constitutive or co-constitutive. Despite more relaxed timing devices than the explanatory forms we have associated primarily with neopositivism, constitutive explanations can still unfold a unilinear—and possibly unirectilinear—sequence. For instance, in 'top-down' constructivism larger, more general, and/or more stable entities constitute smaller, more unique, and/or less stable ones. This sort of constitutive story appeals to neopositivists because the combination of its tidy, singular succession and its flexible narrative devices contains the possibility of specifying autonomous variables, mechanistic-styled processes, or even situational rationality, and thus bringing constitutive explanation within the social scientific mainstream (Checkel 2008a:72). Substantive examples include the metaphorically apt idea that norms 'cascade' down to individual states through 'international socialization' and the 'pressure for conformity' (Finnemore and Sikkink 1998:902–04),[40] the constitution of state identities and interests by international organisations (Barnett and Finnemore 2004:45–72), or the 'logics of appropriateness' that condition foreign policy elites (Tannenwald 2007:65).[41] As I have mentioned, these stories will involve more steps and/or details, but the basic 'shape' that they provide to narrative temporality is reminiscent of the other explanatory forms treated so far.

Process-co-constitutive explanations, by contrast, are generally messier because they are multilinear and use nested narratives. A process is comprised of a series of actions, and describing it requires a narrative in its own right that connects those actions meaningfully into a synoptic whole which can then be situated relative to the entities with which it is implicated. This nested narrative may follow any of the previous forms, or comprise a constitutive explanation in its own right. More importantly, because their theme is *mutual* implication process-co-constitutive explanations must show how multiple entities affect each other repeatedly and recursively, so they interweave two or more sub-narratives. Thus, a process-co-constitutive explanation can never unfold a uni- or rectilinear sequence. It must be *bi- or multi-linear* and *interwoven* in order to explicate the sense of back and forth by which the entities

(1999:86) earlier effort to synthesise neopositivism and scientific realism viewed constitutive explanation as 'non-causal', a view that Kurki (2007:16) rejects.

[40] The norm cascade is one step in Finnemore and Sikkink's (1998:895) overall explanation of a 'norm "life cycle"' and is preceded by 'norm emergence', which emphasises individual 'entrepreneurs', and followed by 'internalization'.

[41] In general, see (Katzenstein 1996). Fearon and Wendt (2002) take a similar approach, advocating situational rationality from the 'bottom-up' and constitutive explanation from the 'top-down'.

condition each other without assigning one of them analytical priority (see fig. 9, p. 190).[42] This markedly different sequence highlights how co-constitutive explanations challenge certain neopositivist assumptions of static structures and agents and 'mono-causality', since interweaving suggests that '"causal arrows" can go both ways' (Koslowski and Kratochwil 1994:224; see also Campbell 1998:10).

Some constitutive proponents view *all sorts* of constitutive explanation as a challenge to neopositivism, based on the belief that constitutive stories deny the variable independence and 'temporal asymmetry' on which causal inference rests (Wendt 1999:83–84, 88; Kurki 2007:180). For example, in Wendt's (1998:106 emphasis added) view 'the factors constituting a Cold War *do not exist apart* from a Cold War*, nor do they precede it in time*; when they come into being, a Cold War comes into being with them, by definition and *at the same time*.' This would contradict the links between constitutive explanation and neopositivism introduced just above, except that it rests on a slight temporal misunderstanding. Wendt identifies *some* simultaneity or co-occurrence, since the Cold War did not *follow* its constitutive factors in a discrete fashion (i.e. no overlaps). But when he goes further to claim that this denies *precession*, Wendt actually upholds a neopositivist view of temporality. By conflating the claim that two entities are non-independent with the idea that they have *identical start points* and *equal durations*, Wendt takes two formerly autonomous objects thought to occupy different, discrete 'time-slots' along a *single* 'axis of time', and crams them into the same slot. Although variable independence is surely vitiated, the sanctity of 'time' as a unirectilinear axis composed of discrete slots remains—it is just that those slots may now contain multiple items. Denying variable independence does not entail that constitutive entities must take the same amount of time and start at the same point—some of the factors that conditioned the Cold War began before the Cold War proper (say, distrust between American and Soviet elites during WWII or reaching back to American intervention in the Russian civil war), just as the Cold War may have outlived some of its initial conditions.[43] Nor does it deny 'temporal asymmetry', unless we understand this phrase in specifically neopositivist terms, which con-

[42] And as interwoven, it will be fairly difficult to render such a story *unirecti*linearly. A co-constitutive explanation might unfold unirectilinearly if the constituents are mutually implicated through a conceptual linkage, as when a 'bride' and 'groom' are conceptually implicated by marriage, but then it is not clear that this moves significantly beyond two different descriptions of the same act (Suganami 2002:33).

[43] My point is implied in the co-constitutive idea that any state might change the international system, for if we adhered to the criterion of identical duration and age as a condition of constitution, then we would arrive at an absurd conclusion that only states present at the creation of the international system (be it 1648, 1919, 1960, or whenever) could change it.

flate '*linear* causality' with 'causal *asymmetry*' and then with '*temporal* asymmetry'.[44] But inasmuch as it still presupposes change and process, some of which is irreversible, constitutive explanation relies on temporal asymmetry as much as any account that does not posit a completely static universe.[45] Constitutive narratives in general do not challenge neopositivist temporality so much as pose an alternative to neopositivist inference within a nearly identical vision of unirectilinear 'time'. For a genuine challenge to neopositivist temporality, as well as to the other forms discussed so far, we need the multilinear and interwoven sequences unfolded by *co*-constitutive stories. Without these, the greater flexibility of constitutive theory's narrative timing techniques is pointless thanks to the rigidified standards imposed by neopositivism. And as we saw in 'top-down' constructivism, it is this flexibility that renders them vulnerable to co-optation for D-N, S/R, or mechanistic purposes.

Constitutive narrative forms
'As B emerges, A conditions B' (process-constitutive)

As a given situation A emerges, B emerges as well and they co-constitute each other. (process-co-constitutive)

A entails B entails A (concept-co-constitutive)

Narrative timing devices

Synoptic theme:	implication, mutual implication
Creative filtration:	inclusive (relevance to A entails relevance to B & v.v.)
Temporal cleaving:	proportionate
Concordant discordance:	processes, narrative emplotment

Intelligible sequence
Unilinear, multilinear interwoven

Figure 9: Constitutive explanations

[44] These steps were popularised in the physical sciences and philosophy of time literatures (see Le Poidevin 2011; Reichenbach 1971).

[45] Without some asymmetry, it would be difficult for constitutive explainers to examine, among many examples, large-scale historical change (Koslowski and Kratochwil 1994:227) or the emergence of national collective identities (Hall 1999).

Historical explanation

Synoptic themes: matters of course

Historical explanation shows 'how one thing followed another "*as a matter of course*"' (Trachtenberg 2006:185; Suganami 2008:335), and presents 'a satisfying holistic explanation' that shows why some course of events 'did not take some other possible path' (Lake 2009:52–53).[46] These matters of course provide answers to questions about 'how particular events are part of an "intelligible pattern of events"' (Trachtenberg 2006:27). To demonstrate such patterns, historical explainers employ a wide variety of unique themes that satisfy only the minimal requirement of elucidating *some* course of events. These include, but are not limited to: volition, chance, necessity (see Suganami 2008:334), contingency (Bennett and Elman 2006:254–56), decline (Gibbon 2001), redemption/resurgence (Ruether 1998; Edwards 2003), progress (Kant 1991), cyclicality (Modelski 1987), and continuity (Gilpin 1981; Sylvest 2005; Lawson, Armbruster, and Cox 2010).

Compared with the explanatory forms discussed so far, the quantity and variation of these themes is striking, and results from two factors. First, historical explanation developed external to IR or to political science, whose behaviouralist disdain for it allowed historians to establish their own standards of viability. Second, within the disciplinary development of IR historical explanation sits most comfortably with interpretivism. Because they seek only provisional knowledge of the conditions and meanings of human actions, interpretivists are open to the plethora of possible synoptic themes that historians have deemed viable in historical explanation. Critical realists also integrate history into theory, although their particular metanarrative of science has little space for certain themes—like chance and contingency—that do not identify ever more stable and thus deeper ontological layers underlying experience. By contrast, although neopositivists allow for historical explanation, this is almost always understood in terms of an intellectual division of labour in which scientific theories might occasionally need to be complemented, illustrated, or tested by historical narratives—the history always sits beside and slightly behind the theory.

Given so many viable themes, historical narrative is quite flexible. There is little in the way of a stringent delineation of format or list of acceptable 'ingredients' (Suganami 2008:336). A historical explanation need not necessarily explicate 'if, then' law-like state-

[46] Lake (2009:51–53) interprets narrative explanation as the 'holistic' (and primarily British) alternative to 'partial equilibrium analyses' or 'comparative statics' in the US academy, and gives epistemological priority to the latter. For a few of the many examples of historical narrative in IR theory, see (Watson 1992; Hobden 1998; Hall 1999; Buzan and Little 2000; Hobden and Hobson 2002; George and Bennett 2004; Elman and Elman 2008; Steele 2008; Hom 2010; Vucetic 2011; Linklater 2011b; Hobson 2012; Lawson 2012).

ments or mechanistic regularity so long as it can plausibly connect a given sequence of events according to basic narratological standards—that is, it contains all the necessary and appropriate elements for driving events from beginning to end.[47] Additionally, whether understood as 'verisimilitude' (Suganami 2008:343) or 'coherence' (Polkinghorne 1988:62–64), a historical explanation's plot need only allow it to answer the question(s) it poses to itself, rather than meeting thematically-dictated standards of constancy, universal logic, or reliability. Historical explanation therefore sits closest to process-constitutive accounts.

Creative filtration, temporal cleavage, concordant discordance

Thematic openness also entails more flexible narrative timing in the sense that a historical explanation can accommodate a greater quantity and variety of elements than the other forms of explanation. Whereas D-N, S/R, and mechanistic narratives seek 'necessary' factors, demote 'volitional' acts, and excise 'contingent' and idiographic elements altogether, historical explanation mobilises all of these to fill in the middle of a story about how some transition took place. This is not to say that historical narratives cannot also nest other forms of explanation within the holistic plot, only that they filter much less stringently (i.e. more creatively) due to greater variety among synoptic themes and greater flexibility afforded by their methodological thematic.[48] Consequently, historical explanations cleave change continua *most proportionately*, since under flexible filtration longer 'time-spans' can receive more involved narrative explication.[49] Their beginnings are selected primarily by reference to specific, plot-internal standards like what particular question the narrator is trying to answer based on the particular question they are trying to answer (see Suganami 2008:343).

In line with their basically narratological approach, historical explanations produce concordant discordance simply by inscribing problematic events in the middle or at the end of a course that matters to our understanding of the world. Endings become concordant insofar as the plot renders them expectable and necessary. As Marc Trachtenberg (2006:27) writes, '[w]hen dealing with events that are at first glance hard to explain (the Pearl Harbor

[47] Historical narratives sit closer to fiction because they allow for literary flourish and helpful details such as 'reality effects' or 'world-building' (Suganami 2008:333 n11, 343). For an involved explication of the links between history and fiction, see Ricoeur (1988:99–240); for historical explanation as a kind of fable, see (Bain 2007).

[48] Suganami (2008:335, 1999:369) refers to three types of 'ingredients' of historical narrative: chance coincidences, mechanistic processes and human acts', which may also be understood as 'contingent', 'necessary', and 'volitional' causes.

[49] Although narrators can still get around this—and must given publication necessities—as when 'big histories' intentionally 'gloss over' much detail or conduct 'history at a gallop' in order to cover lengthy periods. However, these moves still respond only to internal standards of plausibility.

attack, for example), a successful explanation will make those events intelligible by tracing them to causes that are not quite so hard to understand—that is, by constructing a story'. So even though 'the logic of historical change is fairly loose, and the element of necessity is relatively weak', historical explanations 'still talk to a certain extent about the way things *have to be*; and in doing so … draw on our understanding of the way the world works' (Trachtenberg 2006:186). Discordant events in the middle become concordant insofar as the narrator can make them serve the synoptic theme in one way or another, be it tragic reversals, turning or tipping points, forks in the road, and the like. If this all sounds quite a bit like the general exposition of narrative responses to the problem of Time in chapter two, this is once again because historical explanation is relatively unburdened by rigid methodological criteria or scientific metanarrative thematics. That is not to say that anything goes in a historical narrative; rather, anything that goes into a particular historical narrative need only meet that story's *internal* requirements.

Unfolding intelligible sequences

Consistent with their general narratological permissiveness, historical explanations can unfold a wide variety of intelligible sequences: unirectilinear, unilinear, multilinear whether interwoven or simply on a collision course, curvilinear, the possibilities are delimited only by individual explanations' specific themes (see fig. 10, pp. 195). As in co-constitutive sequences, many of these 'shapes' highlight a gap between neopositivist commitments and many subtypes of historical explanation. Critical realism is more amenable, so long as the explanation serves to describe, defend, or refine a deep ontological claim. And interpretivism is quite happy with most any historical sequence so long as it is a useful and intelligible presentation.

As such, it may seem as if historical explanation presents a hard case for my overall argument about narrative timing and its need to respond to the problem of Time. Not only is historical explanation openly narrativistic, it also embraces much greater variation in its substantive content and seems more open to the vicissitudes of Time's flow than any of the earlier forms. However, two points about historical explanation indicate that in spite of this relative rapprochement, historical explanation still replaces the total flux of Time with an orderly and restricted temporal sequence.

First, all historical explanations—and indeed *all narratives* that do not represent the world in 1:1 scale—rely on the assumption that some connections are so regular, law-like, foreseeable, or simply familiar as to be intuitive. In other words, in spite of the differences between history and D-N theory, covering laws or 'microcorrelations' underwrite the intelli-

gibility of historical sequences at every point where connections are considered intuitive or commonsensical (Aristotle 1932:1456b; George and Bennett 2004:227–28). For example, in an explanation of political violence, I will not need to explain how a gunshot kills someone (aim; bullet calibre, trajectory, velocity, and angle of strike; skull density; haemorrhaging; etc.)—I can simply say that someone shot someone else and go on to explicate the political aspects of the act.[50] When she declines to explicate or explicitly emplot connections considered intuitively plausible, the narrator effectively skips over some parts of the events in question by silently invoking the quasi-punctual power of a covering law or constant conjunction. This means that in the guts of a historical explanation that may indeed accommodate discordant change more flexibly than its 'scientific' or 'theoretical' competitors, D-N emplotment is hard at work and the resultant narrative temporality still stands far removed from the totality of Time's flow.[51]

Second, historical narration typically relies on standardised forms of time reckoning.[52] Without calendrical dates, which are often mistaken as self-evident 'historical dates', documentary evidence would be much harder to catalogue and analyse, and its presentation in a historical narrative would require elaborate exposition to connect it with less standardised and less general change continua. Here we might imagine how hard it would be to give an account of 9/11 or the dramatic end of a sporting event (i.e. the 'turn of events' in its 'last seconds') without reference to ready-to-hand techniques of standardised timing.[53]

But along with its contemporary ubiquity, the utility of Western Standard 'time' encourages historical explainers to overlook its theoretical and political implications. For example, despite his resistance to timing standards in the form of 'ready-made plots',[54] John Ruggie (1998a:94) does not resist the use of calendrical and clock markers to locate a narrative's events in a 'descriptive order'. Nor do most historians and historical audiences. Yet no

[50] Hempel (1965:422–23) maintained that even simple concrete events 'posses an infinity of physical, chemical, biological, sociological, and yet other aspects and thus resist … complete description and *a fortiori*, a complete explanation'. Although he was highlighting the difficulty of using covering laws to explain concrete events, this also explicates why, in the face of a potential multitude of detail, historical narratives can only engage *some* empirical data by skipping over other, more obvious connections.

[51] However, none of this indicates that historical narratives are reducible to a series of covering laws—for one thing, an explicit covering law is all necessity and no volition or chance (Suganami 2008:334 n11). For a somewhat parallel argument that co-constitution is actually the 'theme and central subject of historical narrative', see (Onuf 2012:42).

[52] It is not unique in this. I mention this here because historical explanation has more claim to 'taking time seriously', so it becomes more important to show the conservative and disciplinary orientation to Time implied by relying on Western Standard 'time'.

[53] For a fuller treatment of the 'ready-to-hand' associated with Heidegger, see (Ricoeur 1988:93–103), who also shows how 'procedures of connection' that inscribe life in an inhabitable temporality rely on, among other things, the 'poetical character' of calendrical dates.

[54] See p. 157 above.

matter how naturalised this choice seems it still represents an implicit decision that obscures the monumental timing efforts that produced unified systems of 'time reckoning'. Inasmuch as it uses *any* standard measured dates or quantified reckonings,[55] historical narrative relies on a homogenised system of timing whose function is to integrate and coordinate otherwise unwieldy change continua by a single, hegemonic standard—that is, to discipline Time by an act of intellectual synthesis that reduces and renders manageable its total flow.[56] It may be objected that this is not the same thing as grappling with the unpredictable things that we say that Time 'brings'. However, the point of standardised reckoning is to regulate otherwise unreliable and unpredictable processes by providing a precise and widely applicable standard.

Historical narrative forms

As a given situation A with features 1, 2, … *n*, developed, B came about as a matter of course.

As A (1, 2, … *n*), then B because of A.

Narrative timing devices

Synoptic theme:	volition, chance, necessity, highly flexible
Creative filtration:	inclusive, depending on particular theme
Temporal cleaving:	very proportionate
Concordant discordance:	narrative emplotment (tragic reversal, turning point, etc.)

Intelligible sequence

Any matter of course, depending on particular theme

Figure 10: Historical explanations

[55] Such reckonings often provide the title and thematic delimitation: *Eleventh Month, Eleventh Day, Eleventh Hour: Armistice Day* (Persico 2005); *The Twenty* or *Eighty Years' Crises* (Carr 1939; Dunne, Cox, and Booth 1999); American history from '1492 to the present' (Zinn 2005); or *Western International Theory, 1760-2010* (Hobson 2012).

[56] Annals and chronicles do this as well, since they relate events using calendrical units.

Like any good narrative, historical explanation presents not a 'welter of events' but a well ordered, coherent, and cohesive whole that points not only to a sequential conclusion but also to a hermeneutic fulfilment that enables its enactment in the world. Inasmuch as it uses Western Standard 'time' and a relatively limited number of sequences to do so, even historical explanation remains far removed from the wild, complex, and discordant flow of Time. The primary difference is that, like interpretivist methodology, historical explanations grapple with Time less confrontationally than other forms. However, given that it also includes much greater amounts of information and change continua than most or all of the other forms, historical narrative also marks a limit beyond which we cannot develop explanatory alternatives. This indicates that placating Time to some extent is a condition of *all* explanatory viability in IR.

Conclusion

This chapter charted an arc from elegant but ultimately unsustainable D-N narratives of *absolute*, *unirectilinear*, and *quasi-punctual succession* to messy but ultimately still Time-disciplinary historical accounts of *intelligible sequences* that elucidate some 'matter of course'. In between were structural/rational attempts to fill in the D-N explanation's missing middle with a still *unirectilinear* logic, mechanistic metaphors that introduced *multilinearity* for the sake of *regularity*, and constitutive plots that utilised either *uni-* or *multi-linear* sequences to elaborate the conditions of political phenomena. The moves to reliable-yet-fallible mechanistic metaphors and to multilinearity crossed a social scientific threshold, with implications for how certain methodologies engage a given explanatory form.

This arc also included a proliferation and loosening of synoptic standards that allowed narrators more flexibility in the way they used narrative timing devices like creative filtration, temporal cleavage, and concordant discordance. And it suggested that the more empirical elements a given explanatory narrative includes, the harder it must work *to time* them—that is, to integrate and coordinate them with the synoptic theme. For all their differences, the course of events in historical and constitutive, the regular turn of events in mechanistic, the logic in S/R, and the constancy in D-N explanations are all ways of excising discordant changes or rendering them more intelligible and manageable.[57] This indicates that even at their most flexible and temporally sensitive, IR explanatory narratives necessarily replace the totality of

[57] For a hyperbolic example: 'Ultimately, a real understanding of history means that we face NOTHING new under the sun' (USMC General James Mattis, quoted in Russell 2013).

Time with an orderly, intelligible narrative temporality composed of an intelligible sequence that represents an inhabitable world.

This insight suggests a common condition of theoretical viability in IR closely related to the paradoxical relationship between timing and the problem of Time, in which successful timing seems to overcome Time. Theories *must* placate, discipline, or surmount the flow of Time by composing a narrative that is intelligible and meaningful and that thereby replaces the overwhelming totality of Time with a tidy, orderly stream of occurrences that render its conclusion un-puzzling and even predictable. This is the condition of its ability to provide a resource for coordinating actions in the world of international politics, i.e. a *well-timed* narrative produces an *inhabitable world with a manageable 'time'* that shows actors how *to time* international politics in the world beyond it.[58] However, before such a claim can be settled, there remains one especially conspicuous and hard case for my overall argument. In the next chapter, I examine a sub-set of neopositivist IR that denies narrativity most stringently and, by virtue of its purportedly secure link with eternity, seems most unconcerned with the problem of Time.

[58] Consider the otherwise unremarkable way in which Goddard (2013 emphasis added) characterises the importance of theory: 'we know that if we are in *this theoretical world*, then X set of mechanisms is likely to be operating, whereas if we are in *this other theoretical world*, then we should expect Y mechanisms to operate'.

6
Mathematical metaphors for eternity

The main requirement is order, completeness and reliability.
– Friedrich Wilhelm III, King of Prussia, on the establishment of a statistics bureau[1]

[The] progress of Science … is to destroy Wonder, and in its stead substitute Mensuration and Numeration …
– Thomas Carlyle[2]

Introduction

In chapter four, I examined IR's methodological orientations and found that, despite some variation, they all relied on narrativised modes of reasoning to render the political world less Time-bound and more inhabitable. In chapter five, I analysed forms of explanation in IR and found a basic narrative structure running through the that addressed the problem of Time by producing an intelligible sequence of events. Taken together, these chapters demonstrate that a wide variety of IR theorists grapple with overwhelming flow of Time using narrative, which in turn suggests that doing so is a core vocational necessity and a condition of intellectual viability.

However convincing these arguments, their scopes were limited to qualitative examples and thus omitted a major portion of IR research. This chapter redresses the situation by investigating quantitative analysis, the mathematical formalisation and statistical examination of theories. There is significant overlap between quantitative IR and the discussions broached so far, especially those of neopositivist methodology and D-N and S/R narratives, but quantitative studies deserves a dedicated discussion for a few reasons.

First, quantitative IR represents such a substantial sub-field that it would have been impossible to accommodate it within the chapters on qualitative research. Second, it allows me to recapitulate the general argument of Part II in a principal case. Quantitative analysis is

[1] Epigraphed in (Hacking 1990:27).
[2] (Carlyle 2008:53).

the most common method employed in research publications[3] and taught in graduate school, and it sits comfortably within the field's preeminent methodology, neopositivism. To date, it also sets the high-water mark for many scholars who embrace a unified scientific metanarrative of how knowledge about international politics develops and progresses. Given how much of my analysis has concerned various aspects of its vocation, reasoning, and explanation, it would be remiss to ignore neopositivism's champion.

Third, quantitative IR represents the hardest case for my theoretical framework. Neither statistical nor formal models employ the ordinary language used to configure narratives.[4] Furthermore, its mathematical foundations are purportedly tied to 'timeless logic', so it would seem there is very little of storytelling or 'time' here.[5] Therefor, it will be my task in this chapter to unpack the narrative timing and temporality in quantitative accounts and show how these work within the neopositivist metanarrative of scientific progress.[6]

Because this discussion recapitulates my general critique of neopositivism and its explanatory variants, it will be helpful to summarise the relevant points from previous chapters:

> Neopositivists react to *discordant changes* in international politics with surprise, anxious laments about the *problem of Time*, calls to understand the event, and reflections about how and why they failed to anticipate it. This suggests that they are involved in a Janus-faced *timing project* to *integrate* and *coordinate* various *change continua* from the realm of international politics into intelligible and meaningful accounts that in turn enable political actors to orient and coordinate their actions with that realm. Neopositivism is more precisely a *narrative timing* activity embedded within a *metanarrative* of science, which propounds a world that is *inhabitable* because it is mostly *predictable* and *controllable*. Its metanarrative of scientific progress revolves around the *thematic standard of experimental control*, an ideal imported from analytical accounts of successes in the physical sciences that delimits the types of accounts of the social world deemed proper. Such a thematic entails *stringent creative filtration*, which constitutes only non-random, systematic, and autonomous objects as eligible ingredients. It also inspires explanatory forms that unfold *quasi-punctual* (D-N),

[3] See the discussion in (Sprinz and Wolinsky-Nahmias 2004b:5–8).

[4] Although they are often embedded in ordinary language for purposes of publication (see Collins 1984).

[5] Given this claim made by apologists and opponents alike, it would be particularly lazy for a study such as this to fail to take a closer look.

[6] I take inspiration from the critical economist, Donald McCloskey (1991:22): 'The equation is story-like because it speaks of time and therefore organizes experience in time, at least implicitly. The time-speaking themes will shape the raw experience, as a story does when it is more than a mere unthematized chronicle.'

unirectilinear (S/R), or *multilinear* but *highly reliable* (mechanical) sequences, all of which buttress neopositivism's general vision of inhabitability. As a manifold of *narrative timing* activities, neopositivism thus holds the potential to produce a *reified*, *substantivized*, and *externalised* 'thing' called 'time', most often Western Standard 'time'.

Neopositivism's thematic standard also requires *justification* of substantive claims about the world, which often takes the form of statistical tests.[7] These techniques are not the same as explanatory forms. Quantitative IR includes descriptive and inferential research, but most often serves to refine or relegate *other* substantive and qualitative accounts of political phenomena. So we can devise a quantitative model that tests propositions about democratic peace or balance of power, but the development and statement of the propositions and their testing are three different steps in the process of theorising, which is why I have treated them in three different chapters here.

If quantitative IR is as thoroughly un-narrativised and fortified by 'timeless logic' as is often assumed, it presents a problem for my thesis. This would suggest that even if my other arguments about narrativised reasoning and explanatory forms are convincing, the value of and justification for such neopositivist storytelling depends on something *external* to narrative-temporal standards of viability. As such, this might be taken to demote the narrative and temporal aspects of neopositivism to mere instruments (or accidents) of communication rather than core ways of knowing and doing in IR. Therefore, I develop four points that show how even quantitative IR relies on narrative timing to produce a distinctive temporality in response to the problem of Time.

First, I highlight rhetorical peculiarities in the historical development of statistics to show that this putatively logical system manifests a confrontational attitude toward Time. Second, I locate quantitative approaches within neopositivism's vision of an inhabitable world. Third, I unpack narrative-temporal aspects of the general linear model (GLM), the core of frequentist statistics.[8] This exposes the GLM as a mathematical metaphor for eternity reliant on narrative timing devices that severely discipline the flow of Time even as they rely on some aspects of it. Finally, I discuss several alternatives to the GLM that conflate 'taking

[7] This is not to say that quantitative analysis is off-limits to critical realists and interpretivists (see Sayer 2010:118–136; Pouliot 2007:369n12; Hoffmann 2009; cf. Patomäki 2002:133–35).

[8] Although this focus is justified by frequentism's persistent influence in IR, there are alternatives and some of the most bracing critiques of frequentism come from other quantitativists (e.g. Schrodt 2006:336, 2010:1, 2011:2).

time seriously' with an unreflective incorporation of Western Standard 'time'. My treatment of these alternatives is relatively short because I need only show how they fail to move beyond the GLM's particular representation of 'time'.[9] Throughout the chapter, I use research on international conflict to illustrate my argument because it deals with some of the most significant, rarest, and random of international political events and thus exemplifies quantitative IR's confrontation with the problematic qualities of Time. I conclude that we can understand the core of quantitative IR as a cluster of techniques that formally reify qualitative narratives and assess them against the neopositivist ideal of an utterly concordant world—that is, quantitative IR represents a foremost example of a *narrative timing metre* in its own right. In particular, its easy use of Western Standard 'time' suggests that neopositivism's timing metre propounds a particular, quasi-eternal vision of international politics indexed to the clocks and calendars that already direct our quotidian existence.

Statistics confronts the problem of Time

Statistics seems like a neutral conceptual system based on deductive and mathematical rigour. But on closer inspection, the language of statistics provides yet another lament about the problem of Time. Emerging as a response to the collapse of pure determinism, statistics originally identified a *law of mortality* that rendered ultimate finitude intelligible from a certain remove (Hacking 1990:40–41). In cases of more ordinary finitude, law-like regularities 'were first perceived in connection with *deviancy*: suicide, crime, vagrancy, madness, prostitution, disease' (Hacking 1990:3). These were expressed as a *normal distribution*, which subsumes every observed instance of some phenomenon under a curve whose shape indicates its recorded and expected frequency.

The normal distribution fuelled descriptive statistics, which served to 'tame chance' by showing how seemingly random and inexplicable occurrences followed an underlying, stable pattern or principle (Hacking 1990). Descriptive statistics also served to tame various problems associated with Time. Previously, God or fate governed ultimate finitude, while ordinary finitude was a matter of sin. After the decline of religious authority, descriptive statisticians provided some modicum of comfort by suggesting that both obeyed some underlying laws: 'We *coolly* calculate the probability of life, to provide against the contingencies of mortality' (Burrows, quoted in Hacking 1990:72). By lending an air of expectability to hitherto fluid and troubling phenomena the normal distribution served to *delimit accidents* with

[9] Indeed, many such approaches are meant to bolster the GLM (see Pang 2010:471).

mathematics and thus to *emplot the problem of Time*: 'Despite the accidents of conflagrations, the unstableness of winds, the uncertainties of life and the variations in men's minds and circumstances, on which fires, wrecks and deaths depend, they are subject to law as invariable as gravitation … This holds of crimes, and other acts of the will, so that violation itself is subject to law. … These events are under control' (Farr, quoted in Hacking 1990:115).

Other core statistical concepts exhibit substantial poetic license related to social ills and the problem of Time more generally. *Standard deviation*, which formally denotes how much results vary from the expected value, barely masks its roots in establishing expectations for behaviour. 'Lower' standard deviation indicates a better 'fit' between the model's iron-clad logic and empirical reality. *Outliers* are unique results that 'deviate' quite far from the norm engendered in the expected result and thus threaten to undercut the confidence about the future that the model might otherwise impart. Interpreting the significance of such outliers is a crucial element of theory competition in IR, and the goal is almost always to show that they irrelevant by virtue of their ephemerality or idiosyncrasy.[10]

These two terms pervade the statistical discourse. A more forgotten index for statistical uncertainty is the *coefficient of alienation* (Dorans 2000:3). This is the inverse of 'correlation', or how likely two phenomena are to co-occur.[11] As the coefficient of alienation diminishes, we approach absolute certainty because the correlation between variables approaches constancy, whereas a large amount of alienation threatens any warrant for inference, or a given model's 'degree of *goodness*' (Wackerly, Mendenhall III, and Scheaffer 2007:2). Note here that instead of using a more direct antonym for correlation, such as 'disconnection' or 'miscorrelation' or perhaps 'non-correlation', logical thinkers choose a more literary and existentially loaded term: alienation. Although IR tends to simply report the correlation rather than alienation coefficient, the two speak to the tension between certainty and estrangement. Researchers obviously desire high correlation and low alienation, both of which indicate that the model provides a standard that integrates and coordinates the data effectively—a case of good timing that can help *understand* and *solve* the problem at hand (Wackerly et al. 2007:14).

[10] If too many outliers emerge, this may render the data too 'noisy' to admit of analysis (Green, Kim, and Yoon 2001:457; Bueno de Mesquita 1998:142; King 1989:126).

[11] The equation for the coefficient for alienation clearly relates to the correlation coefficient, *r*. Alienation, or 'non-determinism' = $\sqrt{1-r^2}$; where r^2 indicates the 'coefficient of *determination*'; (see Abdi 2007).

A statistically inhabitable world

I mentioned earlier that quantitative IR sits within a neopositivist methodological stance. This is actually backwards, since in KKV (1994), '[*e*]*very* concept … appl[ied] to empirical socials science is borrowed from classical statistics' (McKeown 1999:166). This suggests that the narrative manoeuvres by which neopositivism reasons *from* the problematic experience of Time *toward* a more inhabitable world flow from a statistical mind-set. Therefore, it makes sense to briefly examine what sort of world quantitative scholars view as *inhabitable*.[12]

It is manifestly *not* the realm of international politics. As Daniel Geller and David Singer (1998:1) note: 'War is a rare event in world politics, but it is always with us. How can we say this? … The paradox is that most societies are in continuous preparation for a very rare event.' Another report underlines the paradoxical implications of this: '*In the extreme, how can the probability of an event that has never been seen or may never even have been imagined be predicted?*' (JASON 2009:6). Erik Gartzke (1999) argues that the onset of war is predictable only 'in the error term', in imperfect human responses to uncertainty that lead to foreign policy miscalculations. Quantitative work on war seems to be labouring to explain and predict an event fundamentally embedded in the play of surprise and error, both of which emerge in the continuous flow of new moments and experiences. Indeed, '[s]urprises are endless. Nothing can protect us from them' (Wiles 1971:34). This may make it seems as if surprise is '*the Essence of the Problem*', but we can just as easily say the problem is Time, since the 'tyranny of the new is everywhere the same, and prevents us from performing our proper workaday duty' (Wiles 1971:35–36).

Instead, statisticians prefer to inhabit a realm of high probabilities or determinate connections. The mathematical underpinnings of statistics meet criteria of internal logic and consistency, which provide hope that a well-specified and tested model will have predictive power and scientific legitimacy (Bueno de Mesquita 2009:xix; Schrodt 2011:1).[13] Deduction and logic also link to constancy, or 'universal instantiation' and the eternal (Geller and Singer 1998:14), all of which evoke the promise of that which never changes as the secure standard for coming to grips with that which does.[14] For example, deductive logic guarantees 'a homogenic relation between different phenomena or between aspects of a single phenomenon

[12] They invite this inquiry in the easy way that they refer to classes or sub-classes of events as the 'universe' of analysis (Huth and Russett 1984:515; Nicholson 1987:353, 356; Pierson 2000:264; Maoz and Mor 2002:46, 69).

[13] The payoff of prediction is to '*engineer the future* to produce happier outcomes' (Bueno de Mesquita 2009:xx emphasis added).

[14] Critics also acknowledge the connections between deduction, mathematics, and universal logic; see (Nicholson 1987:366; Vasquez 2009:7, 77n13).

that holds for *all examined, unexamined, past, present, and future cases*' (Geller and Singer 1998:17 emphasis added; Bueno de Mesquita, Smith, Siverson, and Morrow 2005:xii).[15]

The story in the general linear model

Synoptic theme: useful elegance

In order to propound such a stable world in place of the fluid realm of international politics, statistical models must be 'precise', 'unambiguous', and stripped 'of all accidental details' (Kemeny 1959:577). They can include *novel* content in order to triumph over competitors, but such novelty must be *deductively derived* from the model itself (see Bueno de Mesquita 1985:123; Bueno de Mesquita et al. 2005:34–35, 264–65). It *cannot* be a type of discordance that we have found repeatedly attributed to the flow of Time. In fact, within a statistical model's horizon, 'no revolutionary inference can be made, since all possible inference are predicted in advance' (Leamer 1983:40). Thus, all discordant events in a statistical world are *already explained* by the model, and surprise *only* results when we do fail to deduce the full implications of its axiomatic truth (Kemeny 1959:578) or its assumptions (Snidal 2004:235), *not* when experience overwhelms understanding. In this sense, a statistical model serves a function not unlike a metaphor: it surprises *only* in order to rapidly instruct (see Ricoeur 2008:37, xxx).[16] Similarly, it lends, transfers, or carries over meaning from a comforting vision of a deterministic world, imminently inhabitable to social science, to the discordant realm of international politics. However, until they literally reconstitute actual phenomena, metaphors remain *figurative* acts of re-description. Quantitative adherents imply precisely this when they lament the fact that 'the likelihood of an exogenous random shock to the initial data increases over time' (Bueno de Mesquita 1998:139).

In addition to possessing a metaphorical function, statistical models overlap with the general concerns of timing and manifest narrative timing devices quite similar to those that we located in qualitative approaches. Albeit highly formalised, their language serves to *establish relations* between occurrences so that we can assess if and when the presence of some element of experience provides information about some other element (Moore and Siegel 2013:3, 13). More specifically, mathematical terms help statistical models unfold an intelligible sequence that propounds a world inhabitable to neopositivism. We can see this most ex-

[15] It is telling that although they initially acknowledge a deductive/probabilistic distinction, Geller and Singer (1998:16–17) conclude that, by virtue of their 'similar character', probabilistic 'laws' may also assert the *very same* homogenic relation that holds over *all Time*.

[16] Thus, surprising conclusions become more 'familiar' and thus 'seem less surprising *even as the models are applied to new circumstances*' (Snidal 2004:235 emphasis added).

plicitly in the *general linear model* (GLM) of statistical inference, the basic analytical workhorse upon which much of quantitative IR is based.[17]. The GLM is formalised as follows:

$$Y = \alpha + \beta X + \varepsilon$$

Where Y is the outcome (dependent variable), X is the input factor (independent variable), α is the baseline value of Y when the input factor is absent or negligible (y-intercept), β is an estimate of how much the input factor effects the outcome (parameter coefficient), and ε is the error found in differences between the expected (calculated) and actual (observed and measured) values of the outcome. None of this may seem much like a case of narrative timing that configures an intelligible and meaningful story out of the welter of experience, but once we get behind the GLM's highly formalised language we can see that it still manifests narrative timing techniques. The GLM discloses a synoptic theme of *useful elegance*—it is based on the assumption that our knowledge of important phenomena depends on the ability to formalise and measure their normal connections in simple and feasible manner. This theme accords fully with the neopositivist thematic of experimental control, which depends on reducing phenomena to repetitive, mensurable, and hopefully predictable events. By this theme, modellers creatively filter information into *homogeneous* and *independent variables* located in a *causal hierarchy*; cleave Time by *censoring*; and produce concordant discordance in the form of *normalised randomness*. These devices concatenate to unfold an absolute *unirectilinear* sequence, the underpinnings of which expose inconsistencies in how the GLM handles the problem of Time.

Creative filtration

Compared with experience, the GLM uses data that is creatively and stringently filtered in three ways that respect its synoptic theme of useful elegance and neopositivism's general thematic of experimental control. It assumes that variables are *homogenous* and *independent* of one another (King 1989:126–27; Bennett and Stam 2003:166). Homogeneity refers to the 'naïve' assumption that the behaviour of an independent variable (Y) is stable from one mo-

[17] Although this is not always appropriate. Research objects amenable to linear analysis include 'soybeans, brewers' yeasts, and perhaps even U.S. voters' (Schrodt 2006:337), but not international conflict or the democratic peace, even though both literatures are rife with linear and frequentist assumptions (see Vasquez and Henenhan 1999; Sprinz and Wolinsky-Nahmias 2004b:15). Beck and colleagues (2000:24) find that the standard models of international conflict are more specifically logistic because the results in question are binary (war or not-war), but these still rely much on the GLM. Finally, Sprinz and Wolinsky-Nahmias (2004b:15) describe 'quantitative analysis' in IR as ranging 'from simple correlation/covariance analysis and factor analysis to more sophisticated regression analysis', all of which link to the general discussion of the GLM that I pursue here.

ment to the next (Schrodt 2011:2; Patomäki 2002:134). This allows the analyst assign a constant value to the estimate (β) of how influential that variable is (Green, Kim, and Yoon 2001; Bennett and Stam 2003:18). For example, studies variously assume that democracy, state preferences, or decision-making procedures exert fixed influence in international conflicts (see Green et al. 2001:456; Bennett and Stam 2003:166).

Independence assumes that the variables in a given model do not interact (except in the proposed way that is being tested) and that the probability of a given event occurring in the present 'is not impacted by the past' (King 1989:126; cf. Abbott 2001:45; Suganami 1996:100). GLM users thus proceed as if a 'datum is a datum, and one can draw inference with equal certitude across [state pairings] or across years' (Green et al. 2001:441–42, 458). More specifically, modellers assume that all relevant variables change at the same rate and within the same 'time horizon' (Abbott 2001:44), both of which are preconditions for identifying causal order in the model.[18] Yet this also entails that each factor receive its own unique variable term (X) and estimate of influence (β), so the GLM quickly becomes cumbersome unless the model is intentionally kept simple. Thus, 'even the most detailed analyses must remain infinitely removed from a full specification of factors that impinge upon the event being studied' (Bueno de Mesquita 1985:133–34). For instance, in particularly complex examples like international conflict, research designs often only treat 'dyadic' wars between two states. WWI cannot occur in such a model; rather Austria-Hungary and Germany each engage in four simultaneous but discrete conflicts with Russia, Great Britain, France, and the United States (Bueno de Mesquita 1983; Bremer 1992; cf. Vasquez 2009:239–40; McLaughlin, Gates, Hegre, Gissinger, and Gleditsch 1998:240; Suganami 1996:95; Beck, King, and Zeng 2000:22).[19]

Additionally, the GLM assumes homogeneity in the error term (see below, p. 211). This becomes particularly problematic if the model suffers from 'temporal autocorrelation' (see Box-Steffensmeier and Jones 1997), which occurs when some causally important factor excluded from a given 'moment of observation' is necessarily filtered out of each subsequent 'moment' so that the error compounds as observation progresses. For instance, in assessing democracy's impact on international conflict, a basic statistical model might not take into ac-

[18] If variables change at different rates 'it becomes impossible to specify the causal or temporal order' in a GLM, even though events 'of equivalent causal importance just don't always take the same amount of time to happen' (Abbott 2001:47, 46).

[19] Researchers can get around this by adding interaction or lag terms, but such terms are not easily integrated with the GLM and may produce unmanageable complexity (Abbott 2001:57–58). Even quantitative modellers that try to model complex behaviour restrict themselves to '*rationally* complex, adaptive' behaviour (Bueno de Mesquita 1998:132; cf. Beck et al. 2000:22).

count the influence of repeated interactions between countries on the likelihood that they will go to war with each other. However, if past and ongoing diplomacy matters between states, then each observation that excludes this factor adds to the study's bias and the model's predicted results become more likely to diverge from observed results 'as time passes'.[20]

Finally, statistical thinking filters by assuming a *causal hierarchy* in which large and/or important effects only associate with large, stable causes (McCloskey 1991:26). This means that cause 'can never flow from small to large, from arbitrary to general, from the minor event to the major development' (Abbott 2001:44). This 'rhetorical dogma' (McCloskey 1991:32) has important social theoretical consequences, not least of which is that it 'disables' statistical analyses of the 'micro-generation of macrostructure' (Abbott 2001:47) and thus reinforces certain IR prejudices about the systemic level sources of international behaviour (Waltz 1959, 1979; cf. Onuf 2012; Kratochwil 1993). It is also redolent of the venerable aversion to Time, since it precludes 'any causing of the large by the small', of 'the enduring by the fleeting', or of the important by the 'sudden' (Abbott 2001:44, 47). In response to this problem, statisticians simply filter out that which cannot be systematically specified and measured in hopes that if the model 'separate[s] out *merely accidental* circumstances, the general results then present such a *great regularity* that it becomes impossible to attribute them to chance' (Guerry, quoted in Hacking 1990:73 emphasis added).[21] This near fetish for the replicable and repetitive ignores many impactful 'one-offs' or small-N phenomena, including Cleopatra's nose (Abbott 2001:47), the 'accidents' of war (Clausewitz 1989:86, 193), the end of the Cold War, and 9/11—a triumph of the large-N study over the *large-M(pact)* phenomenon.

Temporal cleavage

As with any account of social processes, the GLM cleaves Time by selecting a beginning and end of analysis.[22] But since most of its empirical detail has been lost to homogeneity and in-

[20] This can result when the researcher unintentionally ignores an important factor or intentionally omits it to maintain the model's feasibility. Since the error compounds with each correlated observation, one simple solution to temporal autocorrelation is to observe less frequently so that the total number of errors and consequently their overall impact remain as low as possible. We might say that the solution to a problem raised by creative filtration is greater creative filtration (see Green et al. 2001:459n29). There are few alternatives to this except modelling temporal autocorrelation, and even then, 'there are no purely statistical grounds (beyond the esthetic criterion of parsimony) for distinguishing between different temporal autocorrelation models' (Abbott 2001:55).

[21] Although see King and Zeng (2001) for a technical fix.

[22] This has implications for the reliability of inferences drawn if they stem from an overly restrictive historical window and others can show different results based on larger windows of observation (see Suganami 1996:88).

dependence assumptions the GLM can cleave Time quite disproportionately by exchanging any sense of step-by-step connections for mathematically formalised connections not unlike constant conjunctions. This is problematic if the model includes 'right-censored' data drawn from cases that exceed the observation window. Right-censoring facilitates spurious inferences because it treats a partial case as unchanging after observation ends even though it may very well attain significantly different values in the future (Box-Steffensmeier and Jones 1997:1416, 1430; Box-Steffensmeier, Reiter, and Zorn 2003:37; see also Suganami 1996:95).

Concordant discordance

The GLM also produces concordant discordance through its reliance on the 'null hypothesis'. The null hypothesis is that there is no significant relationship between the independent and dependent variables, or that the relationship is due purely to 'chance'. To be statistically significant, the model must basically be more predictable than the flip of a coin (Collins 1984:331). This seems to make sense at first glance: if we want to know whether a correlation 'really' exists in the population of cases, we must ensure that we have not inferred spuriously from instances that are simply the result of random observations. However, the moniker 'null hypothesis' misleads because it suggests a conceptual and mathematical emptiness that does not actually characterise randomness as treated in statistics (Collins 1984; Abbott 2001).

'Null' connotes a void, non-existence, the absence of effects or any binding force; mathematically it is synonymous with the 'empty' number zero.[23] Some of these concepts associate strongly with the problem of Time in Western thought, especially inasmuch as Time's flow causes extant things to pass away or brings utter chaos, which is a void of meaning. Thus, we can understand the use of the null hypothesis as indicating that we wish to know whether something more than *mere* Time brought about an observed outcome. However, statistics does not treat randomness as 'empty'. Rather, coin flips admit a law-like distribution if the number of instances observed is high enough—repeated flips moves the percentage of tails and heads toward 50/50. Although such 'laws' of randomness were derived from simple, independent events, statisticians also apply them to more complex events and processes (see Hacking 1990:41, 111–12). In this way, discordance in the forms of complexity and unpredictability are subsumed under probability.

This is anything but a 'null' hypothesis absent of effect or binding force. It is in fact a genuine substantive claim about how reality is organised.[24] Randall Collins (1984:334, 331)

[23] (Null, Adj. 2012).
[24] As such, it is also more than just a 'formal language of uncertainty' (Moore and Siegel 2013:175).

argues that testing against the null hypothesis is not a neutral operation, as suggested by its name, but a competition between the proffered theory and another 'theoretical model of the external world' in which 'in fact, certain distributions are produced by chance.' In the 'null' model of the world, a sufficient number of instances reveals that although each one is unintelligible because it occurs 'by sheer accident, or "chance"', or 'plain dumb luck', as a whole they are intelligible as a stable distribution of outcomes (Collins 1984:332). Rather than a 'blind nullity', this is an orderly *emplotment* of discordant events under the synopsis of a normal curve, which renders them concordant by identifying them with a larger trend that removes any significance from the moment or context of their occurrence (see Collins 1984:332). Of course, in this case the emplotment is more typically graphical than narrative, but that distinction contains little difference. The graphical curve representing the normal distribution describes a summary story: when enough unsettling events occur, their collected outcomes settle with a certain proportion under a certain range of possibilities.

Although they do not call it this, quantitative scholars are well aware of the random distribution's ability to render discordance concordant. For instance, in his expected utility model of the end of the Cold War, Bueno de Mesquita (1998) uses a randomised variable to represent the question of how salient security concerns are in various situations. In his view, a primary benefit of this technique is to 'capture the range of possible *flux* in the relative importance of security issues' and especially to 'test the model *while controlling, in a sense, for the potential impact of exogenous random shocks* that alter the relative importance of security issues from state to state and *from time to time*' (Bueno de Mesquita 1998:139 emphasis added). He thereby emplots significant discordance *prior* to the assessment of whether his theoretical proposition outperforms chance.

There is no statistical test for the veracity of the null hypothesis or the random distributions themselves—we have to assume their descriptive veracity if we use probability theory (Collins 1984:336). Furthermore, the normalised vision contained in the null hypothesis is protected from future developments. Neither single nor multiple 'outliers' are adequate to vitiate random distribution because 'any *finite* number of observations of an event, or relationship among variables, cannot be taken as conclusive evidence regarding the relationship among a potentially *infinitely* large number of instances (Bueno de Mesquita 1985:122). To be clear, this is not so much a null hypothesis as a positive proposition about the content of a limitless array of events, or an *infinity hypothesis*. Testing a formal model against such a claim is therefore a competition between two substantive and time-delimited theories of the world: the infinity hypothesis establishes a minimum intelligibility in how something works

and we hope that our proffered hypothesis will surpass it by establishing *more significant* connections in the universe of cases. As Collins concludes, this entails that even a statistical test that fails to move beyond nullity still 'implies that one has extended the range of application of a statistical model of the universe' (Collins 1984:336). This model 'within' the general linear model severely delimits what can be deemed worthy of scrutiny to events amenable to pattern, order, and at minimum to emplotment by the random distribution. When using a random distribution, quantitative scholars are not so much testing against *empty chance* as against *mere normality*.

One further example worth noting here is the 'law of error'. Since errors in measurement are necessarily unpredictable (or else they would be corrected for prior to measurement), statisticians treat the error term as normally distributed (Achen 1978:480; Bennett and Stam 2003:23; Leamer 1983:37; Ostrom 1990:16). This in turn allows them to treat the mean value of errors as zero, which helps justify the truth of the GLM (Anscombe 1973:18).[25] If there is any doubt that this 'law of error' is valued for its ability to draw concord out of discord, consider these celebratory remarks: 'It reigns with severity in complete self-effacement amidst the *wildest confusion*. The huger the mob and the *greater the anarchy* the *more perfect* is its sway. Let a large sample of *chaotic* elements be taken and marshalled in order of their magnitudes, and then, *however wildly irregular* they appeared, an unexpected and *most beautiful form of regularity* proves to have been *present all along*' (Galton, quoted in Hacking 1990:186 emphasis added).

Unfolding an intelligible sequence

These timing devices concatenate in the GLM to unfold an absolute, *unirectilinear* vision of the phenomenon in question. Its synoptic theme of useful elegance filters in only independent and homogeneous variables and allows only big and stable things to cause important outcomes. Its mathematical formalisms purge detail and intermediate connections between events so that Time can be cleaved disproportionately. The normal distribution of error and the 'null hypothesis' (i.e. the infinity hypothesis) insist that past, present, and future form a single and homogeneous continuum with one and only one shape or trajectory—the more events that occur, the more resolute and orderly its *unilinear* connections and proportions become. Taken together, these devices produce a single sequence leading inexorably and directly from *X* to *Y* in which *every change* in *X always* corresponds to a proportionate change in *Y*,

[25] Hacking (1990:160) argues that the idea of 'normal' connected historically with 'objective', which helps explain the normal distribution's 'indispensability' as part of a warrant for 'true' knowledge.

regardless of contextual variation or sequential ordering of changes (Abbott 2001:37–63; Bennett and Stam 2003:166; Green et al. 2001:445; Moore and Siegel 2013:56).[26]

Although the GLM propounds a unirectilinear vision of how *empirical data* fit together, this is readily conflated with a generally unirectilinear vision of how *the actual world* fits together (Abbott 2001:59). As two sympathetic critics of frequentist statistics note, 'when the only tool you have is regression, the world has a surprising tendency to look [unirecti]linear and additive' (Braumoeller and Sartori 2004:135). Whenever this happens, the GLM has shifted from a particular account integrating and coordinating specific change continua to a general vision of spontaneous integration and coordination, from a viable sequence to an implicit claim about what kinds of sequences are viable at all—in short, from an instance of narrative timing to a reified timing metre.[27]

In the especially stringent ways in which it produces a unirectilinear and deterministic sequence, the GLM is an ideal neopositivist tool for understanding political phenomena. It privileges determinism over dexterity, deductive elegance over comprehensiveness or richness, and an eternal metaphor over the problem of Time. Critics often gloss the specific analyses just conducted under a charge that quantitative analysis supports a 'timeless' conception of social life.[28] This is misleading and unhelpful, since Timelessness threatens to vitiate change, experience, language, and biological existence altogether. A more coherent criticism of the GLM on temporal grounds is that even within its own vision of unirectilinear 'time', the GLM is inconsistent: unirectilinear 'time' matters a great deal in some ways and not at all in others. It matters when the GLM assumes straightforward continuity or historical prece-

[26] If X and Y change at different rates, as they often do in international politics, the equation cannot reliably imply a correlation.

[27] For example, the 'linear' in the GLM refers to the straightforward *mathematical* transformation of matrices or vectors (see Abbott 2001:44). A related confusion stems from the mathematical understanding of 'dis/continuous' curves. Discontinuous curves do not have gaps in them, as might be the case in ordinary language, but are rather curves that 'switch' their curvature, like a sine wave. I have noted that critics of 'linear time' often misunderstand or underspecify the term. In part, this is because they are critiquing a misunderstood, colloquial vision of 'linear time', based on these mathematical concepts, in which 'linear' actually means *unirectilinear*. Consider the 'nonlinear' relationships that the GLM cannot handle: sined, cyclical, multilinear, or even simply *curvi*linear (e.g. exponential) accounts of how the world works (see Ostrom 1990:10–11). McCloskey (1991:25) provides a nice illustration of this under-specification: 'The commonest theme of battle history, the horseshoe nail, is a case of a non-linear differential equation: For want of a nail the shoe was lost. / For want of the shoe the horse was lost. / For want of the horse the rider was lost. / For want of the rider the battle was lost. / For want of the battle the kingdom was lost. / And all for the want of a horseshoe nail. The rate of loss feeds on itself.' The connected sequence of events, because it manifests feedback effects and does not describe independent variables, cannot be treated by the GLM, yet any reader can ascertain that it is a generally linear and even unilinear account connecting industrial capacity to regime change (see McCloskey 1991:27).

[28] For variations, see (Alker and Biersteker 1984:126; Chase-Dunn 1995:198; DiMuccio and Cooper 2000:176; Wolin 2004:217; and to a lesser extent, Rosenberg 1994:139; Inayatullah and Blaney 2004:30; der Derian 2008:301); although this is not an invention of critical IR any more than the under-specification of 'linear' (e.g. Mackenzie 2012:20; Smolin 2013:xiii, 9–11, 19–20).

dent. On the other hand, the GLM denigrates this vision of 'time' by its practice and by ignoring the importance of sequence and path-dependence.

Because it is based on the mathematical meaning of 'linear' used as a metaphor for social processes, the unirectilinear temporality put forth by the GLM is crucial to the quantitative approach more generally. For formal models to adequately explain and anticipate using data from events that have already occurred, the past must be a 'good predictor of the future' (Bennett and Stam 2003:8). Moreover, it is only if the past, present, and future exhibit straightforward and determinate continuity that the normal distribution can emplot past, present, and future events under an intelligible and stable curve. Without continuity, rare, surprising, or outlying events cannot be adequately subsumed by a pattern established by more intelligible and more numerous events because they are not 'drawn' from the same sample universe. This is why 'big breaks from past patterns' pose such a problem for quantitative analysis (Bueno de Mesquita 2009:xix).

Critics of the GLM express serious doubts about the continuity assumption. For Collins (1984:354n2) knowledge of the past is 'never a strictly logical basis for inferences about the future. The entire universe up till now may be simply one gigantic accidental sample;[29] if we think otherwise, it is because we *impose* a pattern of causality on it. Statistics does not avoid this; it simply imposes a model of chance distributions, which themselves were induced from past experience.' For others, it is simply that the '"statistical universe" is always new, the future is always unlike the past' (Wiles 1971:33 emphasis added). In both comments, the possibility of discordant change problematises the universal promise of mathematical logic by undercutting the vision of straightforward, unirectilinear continuity, which is a condition of successful inference. Simply by changing untested assumptions, rare events are not only data outliers to be emplotted along a 'normal' curve; they become fundamental challenges to the veracity of the curve itself.

On the other hand, the GLM ignores the idea of continuity when it comes to measurement in that although variable changes can occur at any moment they are only measured at consistent intervals usually coordinated by the clock (Box-Steffensmeier and Jones 1997:1423).[30] The best hope for overcoming this gap is brute calculus, gathering more and

[29] In statistical inference, we assume that past events form a subset of a total population; in inductive inference we assume that there exist enough similarities between one population (the past) and another (the future) to compare them. In either case, we assume a consistent and continuous temporal quality that connects either the subset to a wider array or one array to another.

[30] King (1989) contends that most IR theorists think in terms of continuous processes and use statistical techniques designed for continuous processes, even as they collect only discrete data, although event hazards techniques (treated below) indicate that some continuous processes, such as legislative policy adoption, differ

more observations over smaller and smaller discrete time intervals in order to better approximate the continuous process (Box-Steffensmeier and Jones 1997:1424). But this fix, in addition to aggravating the problem of temporal autocorrelation, is costly and more laborious—a more 'time consuming' solution all the way around.

The GLM also ignores questions of sequence and path-dependence (see Pierson 2004) by filtering out non-systematic factors and cleaving disproportionately.[31] It presumes that 'the order of things does not influence the way they turn out', that a factor's history 'is not relevant to its current future' (Abbott 2001:51, 39), and that the only sequential feature of interest is that '"[w]hen *x* is low, *y* is high"' (Robinson 1980:220).[32] This is the formalised statement of near-punctuality identified earlier in D-N narratives. By filtering out ephemeral or 'small' events and eliding any step-by-step explication of how they influenced outcomes, this presumption props up the causal hierarchy but runs afoul of 'fundamental theoretical intuitions about human events' (Abbott 2001:51, 59), such as the importance of political assassinations.[33] Additionally, it also contradicts the assumptions of continuity already discussed, for if order does not matter it becomes hard to see how the past can provide the normal distribution that subsumes future possibilities.[34] Finally, inasmuch as questions of timing and 'time' involve concern for when particular changes occur relative to other particular changes, the GLM suppresses the *relational nature* of Time in order to propound its *absolute*, *unirectilinear* sequence.

All of this might be acceptable if researchers maintained prudence about the GLM and its variants, namely by foregrounding that it is not a substantive model of social reality but rather a way of testing such models that involves significant trade-offs. However, GLM proponents tend to treat it as a model of reality in which social phenomena 'actually obeyed the rules of [mathematical] linear transformations', as in the conflation of regression equations with the 'laws' of science (Abbott 2001:59) or of unirectilinear temporality with Time as such. This delimits a problematic range of possibilities flowing from the GLM. On one

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unimportantly from discrete ones and are thus amenable to discrete observation and measurement (Box-Steffensmeier and Jones 1997:1424).

[31] Büthe (2002:482) conducts a serious assessment of narrative issues related to this, but views stories as a means to 'test' formal models.

[32] For example, a GLM of the democratic peace makes no distinction between states that achieve independence via secession, mandate, decolonisation, or revolution, although these very different pathways to democracy may exert significant influence on the peacefulness of the new state.

[33] Political assassinations are one example of a quantitatively 'small' event of great consequence.

[34] Even models that take path-dependence into account still assume that causal paths are stable across cases (Abbott 2001:52). For instance, although they sometimes take account of *how* democracy *leads to* peace, democratic peace theorists have rarely considered whether the pathway might actually be reversed in some cases – that peace might help produce democracy (see Layne 1994; Suganami 1996).

end, scholars use a quasi-eternal mathematical metaphor to cull data from phenomena but remain unaware of the substantive, inconsistent temporal vision on which the method relies. On the other, they conflate the model of data and its unirectilinear temporal vision with a substantive assertion about reality itself. Data is not culled from phenomena here; rather experience is reported to a timing standard based on the quasi-eternal promise of mathematical formalism and useful elegance.

Taking time seriously?

Given its rigid yet inconsistent temporality, it is perhaps unsurprising that the GLM engendered explicit calls to 'take time seriously' by either accommodating time-based effects within it or developing comprehensive alternatives. In this section, I discuss both, including time-series analyses, pooled cross-sectional designs, and the probability of rare events as examples of the former, and event history models as examples of the latter. Instead of moving through the programmatic structure of the previous section, I treat these alternatives quite briefly for two reasons. First, the former group works within or on top of the GLM. Second, the latter actually barely departs the GLM on temporal issues. Therefore I simply explicate how these alternatives do little to alter the GLM's temporality. If there is a 'temporal turn' in quantitative IR, so far it has mostly involved doubling down on the standard statistical way of responding to problem of Time.

Time-based amendments to the GLM

One of the earliest responses to time-related shortcomings identified in the GLM was the introduction of time-series analysis to accommodate dynamic phenomena (Stimson 1985:914). Time-series analyses can treat time as an independent variable, as in the effects of elapsed time on negotiations (Brookmire and Sistrunk 1980; Carnevale and Lawler 1986); or as a dependent variable, as in the effects of various factors on war duration (Bennett and Stam 1996; Balch-Lindsay and Enterline 2000). These proceed using data collected over successive intervals, each of which is treated as a different case (Ostrom 1990:6; Abbott 2001:44). Proponents contend that doing this takes sequential order into account (Ostrom 1990:5), accommodates multivocal variable meanings (especially when time-lags are used; see Abbott 2001:50), relaxes the assumption of variable independence using dummy variables to account for duration, and in some cases provides for non-unirectilinear causal relationships (Beck, Katz, and Tucker 1998:1260–61, 1262 n7). Such improvements are meant to reduce errors of inference by assessing temporal dependence in the forms of feedback loops, autocorrelation,

or historical development (Beck et al. 1998:1263) or by assessing the importance of explicitly temporal phenomena such as duration and aging (Ostrom 1990; Beck et al. 1998:1261).

All of these work to correct the GLM's biases so that it may better serve the familiar goals of prediction and control (Box and Jenkins 1970; Ostrom 1990:5; Beck et al. 2000). However, time-series analysis does little to reconcile its problems with Time. The relationship between independent and dependent variables is still assumed as unirectilinear (Ostrom 1990:14; see Abbott 2001) and observation still takes place at discrete intervals so that the data series meets standards of homogeneity (Ostrom 1990:5, 14). None of this questions the GLM's unirectilinear vision of 'time'. Rather, it buttresses that vision by adding data indexed to the homogeneous, unified, and imminently mensurable existential dimension of Western Standard 'time'. This does not reflect any greater attentiveness to broader questions of Time like its association with random, chance, or otherwise discordant events. For example, in time-series analyses there remains 'a basic and unpredictable element of randomness in human responses which can be adequately characterized only by the inclusion of a random variable term' (Johnston 1984:14), which analysts still assume to be small, of constant variance, self-cancelling, and uncorrelated (Ostrom 1990:9; Abbott 2001:45).

Introducing lagged variables actually helps to *minimise* temporal autocorrelation because they are assumed to be correlated closer to zero as lags increase, so the correlation can be treated as converging 'toward zero when the distance in time becomes larger and larger' (Theil, quoted in Ostrom 1990:42). Time-series data and lag terms combine to produce a 'crude approximation' that is more 'tractable' because it assumes that instead of problematic effects mounting in unpredictable fits and starts, the overall flow of Time simply cancels out its own discordant effects (Ostrom 1990:43). This recapitulates the normalising logic of emplotment that underpins the random distribution and helps to turn discordant outliers into confirmatory data points.

Furthermore, as a generally 'linear' analysis, time-series research must treat temporal factors as conceptually identical to other, non-temporal components. This introduces a 'longitudinal' dimension to the data set, which draws multiple data from a single case. Because it is homogeneous, longitudinal data can also be combined with cross-case variations in 'pooled cross-sectional' designs.[35] Although these adjustments claim to respect variations within individual cases and some even filter out any variables that do not change 'over time', their ef-

[35] Researchers tend to favour cross-sectional analysis if they want a large number of cases and time-series analysis if they are worried about spurious comparisons due to autocorrelation or omitted variable bias. Pooled cross-sectional designs address both concerns because the longitudinal component ensures against omitted variable bias while proliferating the number of cases produced by the cross-section alone.

fect is to remove any distinctly temporal features from temporal variables so as to increase the size of the sample population and thus encourage generalisation from the model (Green et al. 2001:458–59). Although temporal factors now provide data, the condition of this is that they be treated as homogeneous with other non-temporal factors—it remains the case that a datum is a datum is a datum.

One area in which we might expect to find more substantial rethinking of the relationship between statistical techniques and the problem of Time is in analyses of rare events. These are just the things that Time is thought to 'bring' and there has been no shortage of them in the international political record. Yet rather than grapple with the meaning of rare events or their relationship to the substantive assumptions of the GLM, IR statisticians simply move to show how they *could have* been predicted or at least expected. For example, while trying to show that the particular variations in factors do not undercut the statistical significance of the democratic peace hypothesis, John O'Neal and Bruce Russett (2001:477) introduce as many lag terms as necessary to increase the number of cases available for testing propositions about rare events. In effect, they parse Time in order to render one of its problematic features amenable to a generally linear correlational analysis. Gary King and Langche Zeng (2001:693–95) think the problem with rare events lies in the opposite direction. By selecting on the dependent variable, they *decrease* the universe of cases from which rare events are drawn so as not to underestimate their probability. Within these 'smaller-N' designs, rare events exert more influence on results and thus help generate an inference that renders them predictable (King and Zeng 2001:693–95). The former case renders rare events intelligible by reducing the significance of their rarity; the latter by reducing their rarity, *tout simple*.[36]

Time-based alternatives to the GLM

Event history models (EHMs) mount a more substantial time-based challenge to the GLM, and have become quite prominent in IR in recent years.[37] EHMs use 'data giving the number, timing, and sequence of changes in a variable of interest' and are thus considered 'ideal for studying timing and political change' (Box-Steffensmeier and Jones 1997:1414; Box-Steffensmeier et al. 2003:33). Although EHM proponents note the technique's alternative provenance in actuarial science (Box-Steffensmeier and Jones 1997:1421), this belies a simi-

[36] Much like these mathematical innovations, temporalized 'advances' in data collection amount to little more than a brutish calculus of continuity discussed earlier. One example is the Polity IIId database, advertised to allow for more precise analysis of the 'timing' of political changes by including sub-annual dating in the data set (day/month/year) (McLaughlin, Gates, Hegre, Gissinger, and Gleditsch 1998:232, 235), something qualitative scholars have been able to accomplish for decades.

[37] For a subject list, see (Box-Steffensmeier, Reiter, and Zorn 2003:33–34).

lar concern as that which motivated the rise of descriptive statistics in the nineteenth century—namely to render the discordant fact of death more intelligible. Where early statisticians constructed the 'law of mortality', actuarial scientists developed 'life tables' or 'mortality tables' that assigned a 'probability of death' prior to the next birthday for each age. So although they emphasise that '[t]ime plays a key role in politics' (Box-Steffensmeier and Jones 1997:1414), EHMs spring from a similar concern to confront the problem that Time devours all living things.

Although they have expanded beyond reckoning mortality, EHMs still manifest this in their rhetorical flourishes. Units of analysis 'survive' for some duration, during which they are continually 'at risk' until they 'fail' or the observation ends (Beck et al. 1998:1264). Consequently, the three fundamental concepts of EHMs are survivor function, event occurrence, and hazard rate (Box-Steffensmeier and Jones 1997:1418). The survivor function represents a variable's history, while the hazard rate reflects 'the risk an object incurs at any given moment in time, given an event has not yet occurred' (Box-Steffensmeier and Jones 1997:1419, 1425). For example, we can use an EHM to calculate the hazard rate of military interventions, which become progressively harder to end as the intervener becomes entangled(Box-Steffensmeier and Jones 1997:1444).

In their formalised terms, EHMs give the distinct impression of quantifying the problem of Time. The idea of a hazard rate lends intelligibility to situations in which every new moment includes 'a heightened air of peril' (Downie, Sinclair, Fay, Langlois, and Baker 2002) and to be part of any social process is to be 'at risk' of some occurrence and to 'escape' it for some duration (Box-Steffensmeier and Jones 1997:1422). Here the metaphor of a statistical universe is quite apt in relation to the problem of Time. Like a guarantee of ultimate finitude, the only way that a unit of analysis 'exits the risk set' is by 'failing' (undergoing event occurrence), so 'at each observation period, the risk set progressively dwindles until, by the end of the observation plan, no units are at risk … or they are right-censored' (Box-Steffensmeier and Jones 1997:1422). The EHM is saturated with the rhetoric of death, which itself is understood as 'as a function of time' (Box-Steffensmeier and Jones 1997:1425).[38]

EHMs are more suitable to dynamic political processes by virtue of their emphasis on duration-dependence, their natural ability to treat variables as unfixed, and the fact that they need not assume the process being modelled is stable (see Box-Steffensmeier and Jones 1997:1417–18). Yet despite such advancements, EHMs' assumptions do little to move be-

[38] By contrast, birth seems to have no place—the population just 'dwindles' until time runs out.

yond a familiar statistical story about time. For example, proponents broach the possibility of 'monotonic' variation as one benefit (Box-Steffensmeier et al. 2003:37). But monotonic curves are only a revolution if we presume that basic 'linearity' is unirectilinearity. Even then, monotonicity precludes oscillation—a variable may increase *or* decrease over successive observations, but not both. Also, analysts link two or more causal variables by 'interaction terms' that allow fluctuation in one variable to change the value of another. This effectively homogenises 'time' as the price of its inclusion: 'time (i.e., process time – the duration that has elapsed in the state of interest) *is no different from any other covariate and, in fact, may be treated as such*' (Box-Steffensmeier et al. 2003:37 emphasis added). This in turn allows researchers to treat the hazard rate as 'time-invariant', a move they 'commonly assume' so that any change in the hazard rate will come from the covariates rather than from a naturally fluctuating situation of risk (Box-Steffensmeier and Jones 1997:1428). The fluvial quality of Time remains a problem that inhibits interpretation in EHMs, 'particularly if conditions rapidly change over time' (Box-Steffensmeier and Jones 1997:1440). Finally, since the EHM remains a probability model that tests claims against the null hypothesis, which we have seen propounds an intelligible and even harmonised vision of how things fit together. Therefore, it seems unlikely that EHMs can produce more than incremental improvements on traditional GLMs and their time-series variants.[39]

Conclusion

In this chapter I explicated the hidden narrative temporality of popular quantitative approaches to studying international politics, including the general linear model, time-series analysis, rare events techniques, and event history models. First, I argued that quantitative approaches are formalised iterations of the traditional confrontation between the promise of eternity and the peril associated with Time. This is evident in the rhetorical flourishes that attend statistical thinking as well as in the timing devices by which the GLM and its variants are com-

[39] A more striking alternative is Bayesian statistics, which departs frequentism by updating beliefs about probability and inferential confidence 'over time' (see Brandt and Freeman 2006; Lee 2012; McGrayne 2012). Bayesian modelling can handle multiple time-series, greater complexity, variable heterogeneity, and temporal autocorrelation (Pang 2010:471, 476), all of which produce a more dynamic and diachronic view of phenomena (McKeown 1999:181). Perhaps most intriguing in our discussion, Bayesian models include 'innovation accounting', which tracks how 'shock or surprise in one time series affects other time series' (Brandt and Freeman 2006:3; see also Pang 2010:471). Unfortunately, Bayesian modelling, and especially Bayesian manipulations of time-series data, has only made inroads in political science in the past decade or so and remains quite rare in IR (Brandt and Freeman 2006:1; Moore and Siegel 2013:176). For now, I will only note that Bayesian techniques seem to focus primarily on the error term and how it effects the model's ability to perform accurate tests (Brandt and Freeman 2006:1), and thus offer alternatives to the normalised emplotment of discordance and prevent temporal autocorrelation, but it remains unclear how they relate to the other temporal presumptions that underpin much quantitative IR.

posed. The GLM is informed by the theme of useful elegance, which comports with the broader neopositivist ideal of experimental control as a precondition of scientific success. Useful elegance dictates especially stringent creative filtration in the assumptions of variable homogeneity and independence and a predetermined causal hierarchy that denies the significance of the more ephemeral and unique occurrences associated with the problem of Time. These in turn help the GLM to cleave Time quite disproportionately by enabling its formalised terms to encompass quite lengthy and complex relations of change. Finally, the GLM renders discordant phenomena such as rarity, randomness, and error more concordant by emplotting them under a normalised distribution that poses as a 'null' hypothesis but is really a substantive claim about the content of an infinite series of events. By these narrative devices the GLM unfolds an absolute, unirectilinear sequence—what statisticians underspecify as 'linearity'—as the condition of good inference, which both depends upon and denies historical precedent, presumes and suppresses temporal continuity, and vacillates incessantly on the question of whether or not 'time matters'.

I then examined purportedly 'time-sensitive' alternatives to the GLM and found them largely reliant on many of its assumptions and/or redolent of a problematic relationship to Time's passage. Time-series analyses help proliferate the number of cases, but only by treating 'time' as a variable just as homogeneous as any other. Furthermore, they simply add this on top of the GLM without resolving any of its underlying temporal inconsistencies. Likewise, rare events focus on the outliers that most GLMs marginalise, but only to further reduce their significance or to effectively deny their rarity. Finally, EHMs employ a different but still Time-problematic language and emphasise the importance of duration, but still work to homogenise the effects of 'time' and rely on the null hypothesis. Therefore, they mark at best a small step away from the temporal tensions of more basic quantitative approaches.

None of these approaches reflect critically on the import of Time or temporal phenomena. Instead, either by omission or co-optation, they try to ensure that Time's flow does not get in the way of statistical significance and inferential confidence. In addition to the discussion developed above, two final points illustrate this claim.

First, inasmuch as it produces a 'thematized story' (McCloskey 1991:22), the GLM's narrative temporality is exceedingly rigid: certain entities are connected in a single, unchanging, and unidirectional way, and this is a precondition for using the model to discover when we can expect variables to fluctuate. Adding elements does not change this, so most of the action (not to mention the bulk of the literature) is in the error term, where correlation and confidence collide with alienation until statistical technique sorts them out and the accuracy

of the story is assessed. But statistical innovations located *primarily or exclusively in the error term* or concerned only with assessing the accuracy of inferences cannot resolve the productive temporal dissonance that runs through the basic statistical model. And inasmuch as explicitly treated temporal elements like autocorrelation contribute to biases in inference, this model *locates* 'time' primarily in the error term, thus reaffirming the idea that Time is a problem standing in the way of scientific progress. In terms of its implicit treatment, the GLM uses Time as a warrant for certain assumptions *and* as irrelevant for others. These inconsistencies stem from its mathematical underpinnings, which offer technocratic guarantors of its internal coherence at the expense of all but the most basic and rigid story structures.[40] These stories often are quite ill suited for ordering the complex and unstable phenomena of international politics.

As such, we might ask whether statistical approaches to IR would be better positioned as under-labourers to middle-range and grand theorists as well as historical, qualitative, and 'merely' descriptive accounts. These approaches utilise non-formalised, ordinary, and literary linguistic devices that provide greater flexibility in grappling with the complex and Time-bound phenomena of international politics, but can also benefit from simple tools that lend greater internal coherence and consistency to the stories they produce. Quantitative techniques would be quite well-suited for this role, since the accuracy of a statistical test shares much with the *narratological coherence theory of truth*: the difference between spurious and accurate inferences in formal models is as much a matter of whether the hypotheses flowing from the model are consistent and sound within the bounds of the model as how closely it corresponds to reality.[41] When we consider how much creative filtration and temporal cleavage is required to produce data eligible for this test, not to mention how little discordance it can accommodate, we might go a step further and conclude that narrative coherence trumps correspondence in statistical inference.

Second, all time-series, pooled cross-sectional, and otherwise time-sensitive GLM researches that I have found assume that 'time' is identical with Western Standard 'time' (e.g. Beck and Katz 1995; Beck et al. 1998, 2000; Bennett and Stam 2003, 1996; Box-Steffensmeier and Jones 1997; Box-Steffensmeier et al. 2003; Bueno de Mesquita 1983,

[40] As McCloskey (1991:25) puts it: 'The analytic solutions correspond to *simply predictable* histories, that is, histories that can be reexpressed as equations.'

[41] Collins argues that statistical significance tests are not even necessary for the logical establishment of the truth of a theory. They are only necessary '*because our intellectual community is socially distrustful of the honesty of investigators*' due to 'competitiveness and institutionalized distrust' (Collins 1984:339). For a related argument about the use of statistical tests in research on non-random data, see (Suganami 1990, also 1996:87n6).

1985, 1998; Bueno de Mesquita et al. 2005; Geller 1993; Geller and Singer 1998; Green et al. 2001; Oneal and Russett 2001; Singer 1989).[42] It is of course undeniable that Western Standard 'time' is *an* instance of 'time' produced through *timing*; but it is neither the *only* timing activity, nor the *only* temporality around, nor is it a comprehensive account of *Time as such*. It is a particular timing practice especially amenable to quantitative analysis because it uses a consistent, general, and enumerated continuum of change to bring order and intelligibility to less consistent and more unique continua. Yet quantitative IR remains unreflective about Western Standard 'time's origins as a *substantive* human project that did not so much *discover* an empty and neutral dimension of social life as it *construct* and *disperse* it (Hom 2010). Quantitative scholars embrace this ignorance by treating Western Standard 'time' as the sole means of reckoning international politics in a 'time-sensitive' fashion.

Furthermore, Western Standard 'time' usually functions as a proxy variable for more complex or less easily specified phenomena. This is how Box-Steffensmeier and colleagues can equate 'duration' with 'process time' in the passage quoted earlier even though there is nothing about clock time that *necessarily* identifies with a political process. For example, 'civil war duration' is meaningless if duration means only the 'amount' of accumulated Western Standard 'time'. Instead, 'duration' works as a metaphor for additive violence. As an independent variable 'time length' is equally uninformative without a connection to some additional social phenomenon—e.g. what aspects of the change continua involved in crisis negotiations become more or less relevant as clock time 'extends'?[43]

Given Western Standard 'time's contemporary hegemony and quantitative qualities, there may be few alternatives for formal theorising. But if so, if clock or calendar 'time' *is* the *only* means by which formal models can incorporate any of the substantial panoply of changes, timing activities, and temporalities at work in the world of international politics, then this at least calls for critical reflection on its substantive, historical, and political roots rather than facile affirmation. Without reflection, 'time-sensitive' quantitative analysis remains little more than a collection of absolute, unirectilinear stories augmented with enumeration and a metaphor for eternity whose *literary temporality* is far too often mistaken for *literal Time* (see Walker 1993:xx).

[42] E.g., the term 'moment' can refer to a wide variety of experiences or events of varying duration depending on the quality of the experience and the observer's unique characteristic. Yet in quantitative research, 'moment of observation' always refers to a specific readout on the clock and/or calendar at which point a value is measured.

[43] For example, see (Box-Steffensmeier and Jones 2004:9).

Conclusion

Queen of fakes and imitators,
Time's the revelator.
– Gillian Welch[1]

A theory is never finished.
– Kenneth Waltz[2]

In this project I pursued the question of *how IR theory relates to Time*, in particular how it is that IR scholars can simultaneously refer to Western Standard 'time' and to the problem of Time. Due to my scepticism about the majority of IR and cognate engagements with the topic, I developed a basic theoretical framework from Norbert Elias' work on timing and 'time' utterances. In order to focus this basic understanding on the specific concerns of IR theory, I combined it with the narrative theory to elucidate an account of *narrative timing*. I then used this to cut into three important stages or 'moments' in the production of IR theories before treating the particularly hard case of quantitative IR. In this conclusion, I review the main points from each of these discussions, pull on the paradoxical thread of *timing and the problem of Time* that runs through the project, and reflect on its implications for time studies in IR and for the field of IR more broadly.

Where did the 'time' go?

It is somewhat difficult to get a project on 'time' off the ground. In part, this is because of loose verbiage in much of the literature, although the primarily hurdle is that there coexist two parallel and seemingly contradictory relationships to 'time' that are easy to identify but hard to reconcile with each other. One is the recent, orderly vision of *Western Standard 'time'*; the other is the long-standing *problem of Time*. Although much of the literature neglects one or the other to varying degrees, it is impossible to imagine ordinary life 'in time'

[1] (Welch 2001a).
[2] (Quoted in Walt 2003).

without the ability to invoke both the steady hands of the clock *and* the threatening hand of Father Time to help make sense of our experiences.

In order to reconcile these 'time' utterances, I made two primary moves in Part I of the project. First, I turned to Elias' ideas about *timing*. Elias takes the unique approach that instead of looking at 'time' we must begin with timing: *the human coordination, integration, and control of two or more change continua in which one continuum acts as a standard for the other(s)*. Only then can we elaborate and organise the various substantive concepts of 'time' found in everyday and scholarly discourse as symbolic representations of various aspects of timing. I expanded Elias' treatment beyond the usual suspects of clocks and calendars to develop a most basic theory in which *any* attempt to relate change continua instantiates timing so long as it is accompanied by a temporal vision or 'time' utterance. This is not to say that *all* timing activities integrate and coordinate the same change continua in the same way using identical timing standards. Rather, it is to broaden and clarify the sorts of activities that may instantiate timing in order to grapple with the pervasiveness of temporality and 'time' in our experiences and to prepare a framework within which to elaborate a variety of specific *types of timing.* I also drew out the specifically sociopolitical aspects of this activity—including the importance of language, the wide applicability of the idea of a timing standard, and the idea of the will to time—in order to draw timing in the direction of the concerns of IR. Finally, I showed how Eliasian timing explains and reconciles both Western Standard 'time' and the problem of Time. This last point can be very briefly summarised as follows. When we attempt to relate continua of change in some orderly fashion, we confront intrinsically challenging phenomena. Through peculiarities of language and interpretation, we symbolise the problems we experience grappling with those phenomena under the general and substantive idea of 'time' as a malevolent, exogenous force that brings the problems to us. The language of the problem of Time thus indicates timing difficulties.

This observation raises a crucial point about the relationship between timing activities and 'time' utterances. Given that we have two primary and incommensurable ways of referring to 'time'—one neutral, domesticated, and dimensional, and the other malevolent, unruly, and figural—the prevalence of one utterance or the other seems to suggest *how well and easily a particular timing activity is going*. In cases where timing is successful and especially where it requires little active effort (passive timing), we treat 'time' more like the Western Standard variant. But whenever timing is difficult, and especially threatened with failure, the problematic variant of 'time' rears up in language. As a consequence of this, we tend to describe timing projects paradoxically as efforts to overcome the problem of Time.

In order to bring this timing-'time' framework even closer to IR and to narrow its focus accordingly, my second move was to combine timing with the insights of narrative theory, which views storytelling as a primary resource for responding to the problem of Time. This allowed us to understand narrative or theorising as a Janus-faced timing activity that *uses timing to produce* an intelligible account of some phenomenon, replete with a vision of 'time', and that also *provides a timing standard* by which we can intervene in the fluid world and thus avoid the calamities that we think of Time as bringing in its wake. By telling stories, we configure the welter of experience into a meaningful whole. Crucially, this is not merely a retrospective activity; it is also implicated in ongoing experiences and actions. Whether making sense of what already happened or in the dynamic present, we 'emplot' experiences by four narrative devices that meet the criteria of timing techniques in their own right. We select a *synoptic theme* that provides a standard by which we *cleave Time* into a manageable chunk of change, *creatively filter* information as ir/relevant, and produce *concordant discordance* by taking shocking events and recasting them as plot drivers in an intelligible 'arc' from the story's beginning to its seemingly necessary conclusion.

These *narrative timing devices* produce two distinctly temporal features of narrative. They effectively humanise Time by rendering some segment of experience *inhabitable* and *amenable to human action* and by *unfolding an intelligible sequence*. Although originally elements of the dynamic activity of emplotment, these devices become reified when they are either successful or threatened by overly discomfiting experiences. At that point, narrative timing devices become *narrative timing metres* because they *pre-determine* standards by which new experiences should be reckoned. However, no metre can decisively tame the problem of Time, for *Time itself is constituted by no less than the efflorescent totality of change continua* that impinge upon experience and action, while every story is limited in scope and length.[3] Therefore, although narrative provides an effective and abiding means of timing our lives, it cannot eradicate the problematic potential that attends Time's flow any more than the standardised clock and calendar. As timing devices, each of these provide greater integration and coordination than is possible without them, but none can accommodate *all* the change continua that impinge upon existence, so the problem of Time can return 'at any time' that our timing activity falters.

[3] If Time includes anything in the world that changes and is related or relatable to anything else, then inasmuch as the world is ever changing, Time and the world are often one and the same. Likewise, while we frequently refer to our life 'in time', inasmuch as our life is constituted from an innumerable array of changes, then our life is Time, to us. This is not to say that life, Time, and the world are analytically identical; rather they are effectively or functionally equivalent in many instances of our symbolic discourse about our experiences.

To return to the crucial question of timing effectiveness and 'time' utterances, we can thus compare a narrator's comments about the problem of Time—invoked by threatening descriptions of Time or evoked in fluvial and chaotic proxies—and the narrative temporality she produces in order to ascertain how well the narrative timing project is going. If the problem of Time dominates, or even provides the only vision of 'time' in the narrative, this suggests that her attempt to comprehend the phenomena of interest is verging on failure, for we connect effects to Time itself if we cannot find any other intelligible explanations for them. Furthermore, even if she does produce a less problematic narrative representation of 'time', if it co-mingles with the problem of Time, this suggests that the narrative's synoptic theme is not an adequate timing standard in its own right—that is, that the narrative product of timing is unable to transmit effectively its specific, coordinated relations from the plot to the wider world of action.

Stranger than fiction, strangest *as* fiction

In Part II, I used the narrative timing framework from Part I to cut into IR theorising at three distinct moments: scholars' disciplinary responses to particularly discordant changes in international politics, their methodological recommendations for making sense of political phenomena, and the explanatory accounts that they produced. In the first moment, I mobilised the narrative theory of action to examine reactions to *WWI*, the *thermonuclear revolution*, and the *peaceful end of the Cold War*—three events critical to IR's disciplinary self-identity. In each, scholars were clearly surprised by the events in question and evoked the problem of Time. They also tried to make sense of the shocking events by adjusting or revising narratives so as to render events intelligible. In the final case, they reflected further on their place in the social scientific metanarrative in which much of IR had become embedded by the end of the Cold War. These efforts all relied on narrative's ability to render change continua more manageable—i.e. less complex and more amenable to emplotment—and to constitute IR as a distinctive field of conduct. This suggests that IR can be seen as a scholarly community that understands and constitutes itself through its narrative responses to change—that is, through narrative timing on a broad scale. When international political changes are particularly discordant, this timing project 'slips' and scholars consequently evoke the problem of Time in their efforts to restore concord to their accounts of how international politics works.

In the second moment, I began to use some of the narrative timing devices developed in chapter two to scrutinise methodological discussions. This showed that, even when not confronted with an emergent crisis, IR theorists recommend narrative approaches to reason-

ing about the Time-bound political world. *Neopositivist*, *critical realist*, and *interpretivist* methodological discussions all include explicit calls to configure stories that replace the totality of Time with some more manageable and orderly vision of a world inhabitable to social scientists because its serial relations are relatively simple and reliable. The extent to which each methodology disciplines the flow of Time depends upon its *synoptic thematic* and the *metanarrative* in which it is embedded. One outcome of this reading of the field is that although interpretivists often run afoul of certain foreign standards of science, it is they who configure the most *realistic* and *responsibly systematic* stories in IR precisely because they do not turn away from the idiosyncrasies, surprises, and complexities that constitute much of the stuff of international politics. Scientific and ontological claims notwithstanding, it is the other methodologies that rely on *science fictions*: neopositivists infer a peculiar multiverse of hypothetical worlds confederated by their quasi-timeless qualities; critical realists imbue abducted tales with a curious zeal suggestive of religious desires for enduring 'anchors' in the fluid and 'temporal world' of human existence. Although interpretivists may provide accounts that suggest that international political realities are stranger *than* fiction, neopositivists and critical realists suggest that *IR theorising is strangest as fiction*.

In the third moment, I employed a full suite of narrative techniques to show that, in addition to critical situations and methodological manoeuvres, IR's actual theoretical *outputs* are produced by narrative timing. Deductive-nomological (D-N), structural/rational (S/R), mechanistic, constitutive, and historical explanatory narratives not only manifest the formal hallmarks of narrative; they also proffer *narrative temporalities* by *unfolding intelligible sequences*. Neopositivism's gold standard, the vision of absolute, unirectilinear, and nearly punctual succession accomplished in D-N narratives, is seductive yet largely ineffectual for making sense of the numerous and complex but rarely constant conjunctions of international politics. Therefore, IR theorists have worked hard to fill in the missing middle of D-N narratives with structure and rationality, mechanistic reliability, mutual implications, or historical matters of course. It is telling that, whether concerned to lend phenomena some semblance of regularity or simply to render them more intelligible, each of these moves necessarily filtered *in* more information than the last, a move that entails greater accommodation of discordance *within* the narrative itself.[4] And even a hard case for my argument, historical narrative, was found to require *some* Time-managing techniques as a condition of viable explanation. Once again, however, the tension between narrative temporality and the problem of Time suggest-

[4] Additionally, we saw that neopositivists occasionally turn to normative ideal-typification or slough off discord in order to keep the narrative temporality 'clean'.

ed that IR's most scientific efforts invoke timing standards that are least apt for the task of grappling with the messy, dynamic phenomena of international politics.

In the final chapter, I recapitulated certain parts of these three moments in an examination of another hard case for my argument, quantitative IR. After showing how statistics poetically opposes Time-bound social phenomena with eternalist imagery, I unpacked narrative manipulations and temporal visions from the general linear model (GLM), which provides the basis for much quantitative research. Despite its mathematical form, the GLM employs narrative timing devices to unfold a *unirectilinear* version of continuity within the broadly neopositivistic vision of a deterministic world. However, in the random distribution and null hypothesis as well as the use of a mathematical understanding of 'linear' as a metaphor for social reality, the GLM's narrative temporality is internally inconsistent: continuity matters in the GLM's connections between variables, when it presumes historical precedent and subsumes random values and errors under a normal curve, and when it predicts based on past precedents; but continuity does not matter when the GLM relies on discrete 'moments' of observation or ignores the importance of sequence and path dependence. Given the centrality of this model to quantitative theorising, it required less discussion to show how methods that claim to 'take time seriously' fail to do so because they simply elevate data derived from Western Standard timing as an amendment or an alternative to the GLM. Although heavily laundered through mathematical formalism, and despite seeming most different from narrative, quantitative IR uses familiar narrative devices to tame the problem of Time with a stringent temporality of its own. Emanating from the neopositivist metanarrative of experimental control, these methods propose a particular representation of 'time' as a *standard metre* for reckoning the diverse and ruinous realm of international politics.[5] This underscores a Faustian bargain in which quantitative approaches sacrifice descriptive richness and contextual importance to a technique that promises to assess the truth of oversimplified narratives as measured by statistical significance. Yet given the temporal incoherence of core quantitative techniques—not to mention the interminable, intra-quantitative debates about the significance of statistical significance[6]—it seems that not even Mephistopheles himself could use mathematics to tame the problem of Time in international politics—that is, *to time* international politics.

[5] Given the deductive and logical claims underpinning mathematics, this often looks like a paradoxical attempt to *produce* universal and quasi-eternal relationships.

[6] For example, on the strength of various correlations in democratic peace propositions, see (Spiro 1994:76; Russett et al. 1995:171 n15; Gates, Knutsen, and Moses 1996:3; Henderson 1999:218; Kinsella and Russett 2002:1051; Singer 2002:86; Xenias 2005:367–68).

New 'times' for IR?

Given the significant effort required to excavate and clarify the distinctive view of timing and Time employed in this thesis, it may reasonably be asked what dividends accrue to such a laborious investment. To adapt one of the epigraphs above, what does a focus on timing before 'time' *reveal*? I think that the theoretical framework constructed in Part I opens up expansive avenues for future research, while the argument developed in Part II holds particularly striking implications for IR as an academic field and vocation. Because Part I was often highly abstract, I first sketch future research possibilities briefly, before focusing on the implications of Part II for IR.

Going further with timing and 'times'

By focusing on the timing activities that engender 'time' references, my account offers a coherent and rigorous theoretical framework for assessing the various ways that we relate to 'time' and speak about it. In particular, it accommodates and explains two seemingly disparate discourses of 'time' that have bedevilled efforts to treat them philosophically. Now the price of this accommodation is that my framework can be considered *excessively general*, and thus vulnerable to the critique that in trying to explain so much it actually explains nothing. However, this generality is justified by an empirical ubiquity—'time' is already everywhere in language and in life. Furthermore, my elaboration aims for a totality-in-multipicity more than any unity-in-abstraction by gathering a wide variety of activities within the ambit of timing. Between these observations and the aporia attending other literatures on Time, there seems little reason not to begin with a very basic approach and then elaborate particular forms of timing, as I did with narrative timing.

Of course, narrative is but one sort of timing, and there remains any number of other types of timing to be identified, elaborated, and interrelated. In particular, we need to learn more about the timing activities implicated in political *practices*, of which political narratives are an integral subset. We might also investigate further the relationship between Western Standard 'time' and the modern international system, which has only been sketched so far (see Hom 2010). Finally, since the problem of Time features heavily in the tradition of political theory that informs much IR (see Markus 1970; Gunnell 1987), there is much we can ask about the importance of timing to issues of order, security, power, justice, and authority.

The historical record of international politics and foreign relations recommends these inquiries. It is difficult to understand the lengthy development of the international realm without an account of how human groups have grown larger and larger in size, diffused fur-

ther and further over territory, and integrated more and more with other groups and with the natural world thanks to sophisticated concepts and practices that facilitate orientation, coordination, and control (Gunnell 1987; Elias 1989a:212, 2000, 2007a; Watson 1992; e.g. Buzan and Little 2000; Linklater 2011b). We might then say that through monumental timing efforts and with results proceeding in fits and starts, humans have moved from associating in isolated clans to villages, cities, societies, kingdoms, states, empires, and supranational organisations. All of these developments relied on extensive and proliferating timing projects and thus repeated encounters with discordant change. For instance, transgressing natural geographic boundaries such as rivers or mountains may bring a group in contact with other, very different, groups; crossing oceans will almost certainly lead to strikingly novel and increasingly complex encounters. In such instances, people can either turn back or work *to time*—to establish some concord in the midst of discord by using a frame of reference to integrate and coordinate their actions with others. Because timing is crucial to human existence, tensions in timing attended every shaky step between the earliest and smallest human collectivities and the current global age. Through hunting and gathering, calendars and organised agriculture, revolutions in violent technologies, sophisticated intellectual systems, transoceanic explorations, empires, the globalisation of Western Standard 'time', and total war and thermonuclear interdependence, features extracted from a multitude of timing activities embedded deeper and deeper into language and lent 'time' both its abstract and neutral as well as its concrete and problematic qualities.

After centuries of such timing projects and linguistic calcification, then, the very marrow of 'time' now seems both homogeneous and malignant, and time theorists labour to overcome this contradiction. Yet the multi-valence of 'time' is not a philosophical problem so much as a collection of predicates that indicate the multitude of past and ongoing timing activities by which humans organise themselves and go on in the world. Such transpositions promise little in the way of metaphysical import, but they are quite helpful for tracing and assessing the extent to which aspects of human life are well- or poorly-timed, and amenable or resistant to timing. Furthermore, they explain why such projects engender references to the need to placate, grapple with, overcome, or even tame Time itself. We confront the problem of Time generally as an external symbol of the tension between our will to time and the challenges in doing so, but the varieties and vicissitudes of this dynamic beg for further analysis.

By pursuing these such avenues, IR can begin to elaborate and disaggregate one of the core 'metaphysical assumptions' underpinning modern political existence (Walker 1993, 2009). I also believe that these avenues lend support to Hutchings' (2008) call to take *het-*

erotemporality seriously. She proposes this as an ethico-political alternative to the unified temporalities produced in international political theories, and the framework developed here can provide evidence that her call is not just an alternative to the theoretical status quo but also a *return* to the *empirical baseline* in international politics: by focusing on timing before 'times' we see that the international politics is *intrinsically heterotemporal* in that it includes a multitude of timing activities and, at its upper limit, *all* the totality of change continua that might possibly require integration and coordination. Now this will almost certainly complicate our basic understanding of timing and Time, but such is the nature of continuing to explore continua that continue to change. Hopefully it will also result in a much richer descriptive taxonomy of socio-political timing activities and the 'times' they engender.

Timing projects, timing standards, and IR

In addition to these far-reaching proposals, this project holds four immediate implications for IR. First, it proffers a *unified vision of IR as a social science*, but not in the usual way implied by 'unity of science'. Rather, IR is a collective effort to make sense of international politics by the use of various sorts of narrative timing.[7] In chapter five, we saw that two putatively incommensurable methods—D-N and historical explanations—actually circle back to each other. Furthermore, D-N accounts only accomplish absolute and quasi-punctual succession by assuming that some historical pathways are so regular as to require no elaboration, while historical accounts only work to the extent that some of their connections are 'covered' by shared intuitions about how the world works that offer absolute and quasi-punctual succession in all the points in a story that we happily skip over. There is not so much a nomothetic-idiographic divide as there are two *genres of social scientific narratives* about the world that each substitute clean narrative temporality for the overwhelming flow of Time. If some will insist that we must have a methodological or explanatory hierarchy, then perhaps the *pertinence* and *flexibility* of the narrative genre relative to its phenomenal objects can provide an alternative rubric to the usual value scale imported from philosophy of science. This alternative privileges narrative forms that both '*speak to*' and remain able to *change with* the many 'times' found in international politics as more useful and durable sub-sets of timing than accounts that promise universal and constant utility but in practice look more like one-and-done efforts—better for a theory or explanation to survive by flexibility than to mistake its brittleness for thriving permanence.

[7] See (Suganami 2008:338–40), in which 'narrative is the connective' between the natural sciences and history.

Second, it opens up a discussion about the relationship between predominant modes of IR theorising and the prevailing features of international political experience. Political practitioners and scholars alike remark on the temporal qualities of both the international realm and its study far too much for the field not to reflect more than it has to date on Time, especially the problem of Time, and what these mean for the production of knowledge. In addition to the many instances covered throughout this project, consider the following indicative and thoroughly unremarkable comments (all emphases added):

> 'There are profound issues in play here. Once a strike [against Syria] is launched, if one is launched, *the sequence of events that will follow carry with them great risk and great uncertainty*' — Rep. Scott Rigell, R-Va.[8]

> 'When governments have a clear policy, they have *anticipated* a situation and they know *what they want to do* and where they want to go …' — UN Secretary General Kofi Annan.[9]

> '[Structural realism] explains the *process* of balancing as well as *predicting* that balances *recurrently* form. The theory cannot say *how long* the process will take' (Waltz 1997:916).

> '[T]heory tells scholars *when* mechanisms are likely to operate. … it [specifies] "combinations of mechanisms" that "interact in specified and often *recurrent* scope conditions or contexts to produce outcomes"' (Goddard 2013; quoting Bennett 2013:470).

Notable contours of recent work in IR provide further support for this. The 2014 International Studies Association Annual Convention, whose theme is 'Spaces and Places', treats it as self-evident that 'International Relations scholars are *keenly aware* of the role of *temporal dynamics* in understanding phenomena of international politics, and the *influence of temporality* is *acknowledged* in works adhering to diverse methodological traditions' (Iqbal 2013 emphasis added). That same association's flagship journal, *International Studies Quarterly*, featured explicitly temporal themes in the titles of eighteen percent of its articles published in 2011 and 2012—one of which posited that 'a temporal turn' in IR was well underway (Berenskoetter 2011:664). Indeed, a cursory search of the recent literature reveals such temporal concerns as assessments of neorealist and constructivist predictions about the post-Cold War international system (Fettweis 2004), a critique of the contradictory use of 'time-horizons' in one of the most well-known of those neorealist efforts (Lee 2002), experimental analysis of 'the dark side of the future' in iterated Prisoners' Dilemma games (Tingley 2011),

[8] (Quoted in Khan 2013).
[9] (Quoted in Gowing 1994).

and the role of Time in the functional differentiation of global social relations (Kessler 2012) and political subjectivity (Solomon Forthcoming). In addition to demonstrating the field's interest in Time, this brief survey also shows that temporal concerns feature in several emerging research markets—'third generation' constructivism, experimental methods, new systems analysis, and subjectivity—that have generated more widespread interest.[10]

Yet despite the pervasiveness and centrality of issues of Time to international politics and IR, the field remains by and large unreflective about Time. In particular, one of the key implications of this project is that to begin to really grapple with the temporal questions of politics, we must engage with timing and the crucial follow-on issue of *timing standards*—the themes that provide the frame(s) of reference by which IR theories synthesise and coordinate pertinent change continua into intelligible, coherent, and enactable accounts of how international politics works. From whence and by what justification did IR's current timing standards enter into scholarly discourse? They primarily came from exogenous, retrospective, and analytic-reconstructive metanarratives of natural scientific progress (see Gunnell 1975, 2011; Jackson 2011). Although these metanarratives displayed little to no interest or experience in the concerns of international politics, they have proven irresistible to many IR scholars. There are likely several reasons for this, one of which is that such stories turn away from the problem of Time and toward its longstanding and more comforting Other, eternity, for knowledge warrants in the form of objective, stable, orderly, and ideally universal or at least very large-N standards. As we have seen throughout Part II of this project, such a preference denigrates process, change, instability, and particularity at conceptual, methodological, and practical levels. Yet it is precisely process, change, instability, particularity, and small-N/big-M(pact) events that constitute much of the international realm. This is not just my own empirical assessment, it is also that of much of the field, as the pervasive references to change, effluvia, and the problem of Time detailed throughout Part II indicated. And it raises an unavoidable question about the appropriateness of foreign standards for timing international political change continua: can we really expect to time international political changes simply by

[10] The third generation of constructivism turns away from 'triumphalist', 'via media', or 'problem solving' constructivism (which supplanted seminal works such as Kratochwil 1989; Onuf 2012) and toward a more critical and reflective engagement with identities, norms, and political legitimacy (see Barder and Levine 2012; Steele 2013). For examples of the other emerging trends, see (Imai, Keele, Tingley, and Yamamoto 2011; Tetlock and Belkin 1996a; Albert, Cederman, and Wendt 2010; Guillaume and Huysmans 2013; Ndlovu-Gatsheni 2013; Jung 2014).

importing and imposing standards that possess no special relevance to those changes and that have yet to synthesise or coordinate them with much success?[11]

This question can be put more starkly. Recall that one of the implications of the relationship between timing and 'time' utterances is that when the problem of Time rears up in language, this suggests that the timing activity being discussed is not going well. Given that scholarly reckoning has so far done little to fulfil its vocational impulse of alleviating the ruinous state of international affairs, and given that IR discourse is saturated with both quasi-eternal temporal visions (including Western Standard 'time') *and* the problem of Time, we have to ask *whether IR as it is currently constituted is a faltering or failed timing project*. At minimum, it remains an entirely active and relatively nascent effort, so perhaps the silver lining of this gloomy question is that there remain copious opportunities to revise, rectify, and reconcile our narratives of international politics with their object matter. However, the arguments developed above also suggest that doing so will be unnecessarily difficult if IR continues to over-privilege foreign timing standards.[12] When it does so, IR embraces other disciplines' issues and ends up mistaking the international realm's nature for iniquity, its essence for evil. Surely IR already has enough home-grown challenges.

Third, and relatedly, we can begin to think about what different social scientific standards for timing international politics might look like. What standards of scholarship might supplant the quasi-eternal ideals already mentioned, which inform so much of 'normal' social science and mainstream IR? Developing and elaborating such ideas is sure to be a lengthy, thorny, and contentious process, so for now I just want to note the potential of the very antitheses of quasi-eternal standards, which are generally more (if not entirely) aligned with interpretivism's metanarrative of provisional knowledge.

We might cultivate explanations, ways of reasoning, and a general vocational disposition informed by much more supple themes that not only accommodate but privilege the idiographic, the inconsistent, and the ephemeral aspects of international life. In defence of idiography, the non-existence of nomothetic successes in the field effectively self-recommends that we *privilege* historical, qualitative, and other approaches commonly marginalised for generating too much case-specific information. In any epistemological calculus, it is surely better to know at least one thing about one place in a particular moment than to know nothing about everything, everywhere, in perpetuity. In defence of inconsistency, we might take a cue

[11] For an unremitting argument about how such practice 'mortgages' IR to philosophical debates with no necessary connection to successful science, see (Gunnell 2011:1465–66).

[12] This is not to say that scientistic techniques have no place in the field, only that they should not be allowed to set the timing standards for the whole of the field.

from interpretivist ideal types and pursue further means of elaborating variation and impermanence in socio-political life while refusing to treat these qualities as outliers from some fantastical norm. Here a more deliberate study of metaphor in IR will be important for explicating the potential numerous ways in which we can employ language as a dynamic vision of the fluid phenomena of socio-political life (Ricoeur 2008:351).[13] Also, we must at least consider the possibility that the multitude of phenomena that we group under singular objects of analysis like 'international conflict', 'diplomacy', 'state', 'structure', and 'agency' are simply too different to submit to a common term—that is, we have to engage the possibility that various ontological foundations of IR have little beneath them but disciplinary doxa. This does not preclude theory, however, if we adopt the metatheoretical standard that theory is not for establishing similarities among particular instances but rather for accounting as rigorously and systematically as possible for their differences (Tilly 1995:1601–02). Finally, in defence of fleeting occurrences, our appraisals of these should be conditioned less by metanarratives of 'good' science and more by their actual impact on international politics. The peaceful end of the Cold War, 9/11, and highly unpredictable elite decision-makers may be singularities. No matter, if contemporary international affairs are unimaginable without them, then they deserve theorisation.

There is little doubt that these brief considerations push IR away from explanatory-predictive social science and more toward a descriptive or speculative project. But this is only a problem if we continue to bow to alien standards of science. Freedom from such interlopers is also the freedom to consider the possibility that IR has never really progressed beyond the description of its objects of analysis. I do not mean this as a criticism, either, for if IR's objects of analysis are as fluid as many scholars claim, then describing them adequately is a *full-time* job. This is one reason why some scholars still committed to many of the tenets of mainstream social science also welcome the possibility of developing 'increasingly *comprehensive historical explanations* of *particular cases* drawing on theories' as well as 'drilling down deeper' into particular phenomena with the possibility of disaggregating them into multiple sub-types (Bennett 2013:473). If done rigorously and as systematically as possible, such an effort will still rely on synthesis and coordination, and thus may proffer the beginnings of genuine alternative standards by which to time international political changes.

The fourth implication of this project is the possibility of a dramatic relocation of IR within the academy. Over a decade ago, four political scientists pointed out correctly that

[13] For some engagements with metaphor in IR, see (Chilton 1996; Marks 2003; Little 2007).

'God gave physics the easy problems' (Bernstein, Lebow, Gross Stein, and Weber 2000). My thesis suggests they could have gone further: *the gods of Time* gave *all other scientific pursuits the easier problems*. Compared with other disciplines, IR grapples with the largest, most 'open', most complex and dynamic system—in short, the most Time-bound realm of all. It is not that IR has failed as a social science so much as that *science has failed IR*. IR has borrowed many of its methods, metaphors, (meta-) narratives, and concomitant timing standards from other disciplines, so if there is any explaining to do, it must come from other disciplines and from those who insist upon importing such standards into IR. The rigour, parsimony, or elegance of those visions might succeed in producing happier 'times' in simpler domains, but in IR they have produced mostly a unified but enervated timing metre just where multiple and robust techniques are most needed. In such circumstances it is easy to lament our inability to win a game rigged by timing standards misappropriated from more cloistered pursuits. But rather than damning IR as some wretched and unwashed sub-discipline that cannot get its facts, theories, and predictions right, the arguments developed in this thesis suggest that international politics is the realm in which paeans to academic progress lose their seductive harmony, where scientistic epics are exposed as tall tales, and where the glib elegance, dear stability, and eternalist certitude of more domesticated pursuits are baptised in the river of Time.[14]

If IR scholars necessarily reckon a ruinous realm, as the historical record and their own remarks suggest, then the 'smell' of Time is the essence of intellectual courage, not a 'taint' on their academic honor. Given the immensity, density, and mutability of the international realm, it is simply disingenuous to bemoan the more discordant aspects of Time's flow such as dissolution, imperfection, and discomfiting surprise.[15] These aspects are *just* what international politics is composed of and what sets it apart from other domains of inquiry, so we might as well embrace the challenge of just how to till our own unique field instead of farming out the project to more elementary timing projects (see Ricoeur 1988:273). This will require scrutinising the various intellectual traditions from which IR draws and de-programming our intellectual dispositions.[16] But if it really desires to 'take Time seriously',

[14] Similar arguments about political theories can be found in (Hutchings 2008; Walker 2009).

[15] Furthermore, Time is not only the condition of discordant change; it is also the condition of positive possibilities. Yet IR remains too reticent about large swathes of the global population for whom stability, continuity, and order hold little appeal (see Linklater 2007a:46–47).

[16] Critical scholars have begun to do this by showing how IR conceptual resources connect intimately to the project of managing and preserving certain arrangements of power (e.g. Schmidt 1998; Hobson 2012). My argument is that all projects—critical or otherwise—need to temper the desire for stable factors, durable structures, accurate predictions, or any sort of fixed outcomes. Properly reflexive and critical accounts must delimit the *reification potential* of their preferred vision of how the world should work in order to prevent it

IR must start by engaging with the idea of timing and the question of the efficacy of extant timing standards, which entails changing its prevailing tune about pragmatic, temporary, and stopgap approaches. In short, IR must become more comfortable in the furniture of finitude and less content with empty monuments to eternity.[17]

It may well turn out that IR's mostly confrontational ways of grappling with Time are the *only* means by which complex and discordant phenomena can be rendered intelligible and thus inhabitable. However, so long as these approaches stem from uncritically imported timing standards indexed to quasi-eternal ideals, this possibility is little more than a presumption and thus a wide-open question by virtue of its neglect. The state of the field in general, and my analysis in particular suggest that inasmuch as IR continues to rely on dead metaphors and impertinent, ineffectual timing standards borrowed from other disciplines, it will continue to configure narratives that mostly facilitate the habitation of entombed aporias and ensure that emergent changes engender intellectual and political emergencies. When it adopts neopositivist and critical realist methodological narratives; deterministic but impoverished forms of explanation that privilege regularity over reality; and quantitative techniques; IR gives away too much to foreign timing projects and standards ill-suited to the formidable and fluid issues of international politics. Interpretivism and richer forms of explanation like constitutive and historical accounts do better. Yet since IR must reckon ruin, we should begin at the beginning, with problem-specific and pragmatic timing standards calibrated for description, idiography, and inconsistency and embedded within a most provisional, prudent, and open-ended vocational metanarrative. We must begin by developing timing standards scrubbed clean of the smell and taint of eternity.

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from becoming a *standard* by which scholarly or political practice is *timed*. Avoiding teleological or otherwise brittle endings is an important part of this (Hom and Steele 2010; Hom 2013). For a similar argument presented in much greater depth, see Levine's (2012) re-interpretation of critical theory in IR. I came to this excellent and inspiring book very late in this project, and although I believe there are numerous and strong connections between it and my project, Levine works with such different literatures and idioms that I cannot do them justice here. I hope it will suffice to note that when Levine (2012:12, 16) discusses 'reification *as such*' and theories as not only describing the world but 'redacting' it, he address dilemmas quite close to narrative reification and the relationship between Time and narrative temporality.

[17] This does not mean we cannot study the relatively rare durable structures and stable factors affecting international politics. These are legitimate *objects of analysis* that should be of considerable interest if the world is as dynamic as IR scholars seem to think it is. Nevertheless, such rare continuities should not provide hyperbolic metaphors to scientists in search of practical inspiration.

Appendix
Glossary

Active timing
timing that requires conscious choices and significant effort

Concordant discordance
a poetic resolution in which the enigmas and discordant changes of Time are transformed into plot drivers; includes tragic reversals, tipping and turning points; works through metaphor and narrative; informed by the narrative's synoptic theme

Creative filtration
process by which information is determined to be appropriate or extraneous to the plot; both 'sifts' and constitutes change continua; informed by the synoptic theme

Flow/passage of Time
the symbolic description we give when *a variety* of timing activities and pertinent change continua intermingle; if they interfere with timing, we might instead refer to the 'flux' or 'rush' of Time

Inhabitable world
a coherent and self-sufficient situation described in narrative that makes human agency possible and meaningful

Narrative temporality
the intelligible unfolding of a self-sufficient and inhabitable world in a narrative; replaces Time's discordant and multiplicitous flow with quantitatively diminished, qualitatively enriched, and well-coordinated elements open to human intervention; mimics Time's passage but in an orderly fashion

Narrative timing

the Janus-faced timing activity of 1) producing a narrative by *timing*, that is by integrating and coordinating various change continua into an intelligible, meaningful, and enactable plot, which uses some theme as its standard of reference and which produces its own vision of 'time' (or narrative temporality); and of 2) using that temporal vision as a *timing device* that provides a means for the orientation and coordination of human conduct in the world; these two aspects may be thought of as narrative-internal and narrative-external timing, respectively; narrative temporality provides the pivot between them

Passive timing

timing that is almost subconscious and requires very little effort

Problem of Time

originating in Ancient Near Easter cosmologies, the idea that Time is a malevolent agent or force that 'brings' dissolution, discord, and death to human existence

Punctual

a precise and finite point with no extension, the precise observance of a rule, the quality of being exactly or aptly timed

Quasi-eternal / metaphors for eternity

attributions of lastingness or endurance, stability, structure, and order that evoke but do not instantiate eternity

Quasi-timeless

characterised by severely limited change

Synoptic theme

an idea by which the narrator understands otherwise disparate experiences as components of a single, coherent whole

Synoptic thematic

a formalised idea about what kinds of concrete themes are viable; a metatheme that provides a larger whole within which individual themes are embedded

Temporal cleavage / cleaving Time

process that truncates change continua as an initial step toward their emplotment; establishes beginning and ending of the story; informed by the synoptic theme

Temporality

a particular, ordered sequence of changes that results from human interpretation

Timing / to time

the act of integrating and coordinating multiple continua of change in meaningful ways that uses one change continuum as the standard by which the others are integrated and coordinated; used for purposes of orientation and social control

Timing standard

the change continuum that provides the frame of reference and rubric by which other change continua will be time

Time

time *per se*; or the totality of temporalities, timing activities, and change continua that impinge upon experience

Time-bound

inextricably linked to the totality of Time's flow; a Time-bound realm is one in which complexity, interference, and the unexpected are enduring features; this does not refer to the more colloquial sense of 'time bound', which usually indicates that something is periodised

Unfolding intelligible sequence

a narrative series in which every component has its proper place and purpose and nothing important is left out; a directed plot 'arc'

Western Standard 'time'

vision of Time as an abstract, unified, homogeneous, and unthreatening feature of existence identified and measured by a standard mechanical clock or Gregorian calendar

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